A Statistical Account of Bengal.

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VOLUME X.

DISTRICTS OF DÁRJÍLING AND JALPÁIGURÍ, AND STATE OF KUCH BEHAR.

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PREFACE

TO VOLUME X. OF

THE STATISTICAL ACCOUNT OF BENGAL.

THIS volume treats of two British Districts and of a Native State lying along the southern slopes of the Himálayas. The two British Districts consist, to a large extent, of a sub-montane tract, annexed from Bhután in 1865, after a war into which we had been reluctantly forced by aggressions and insults. The more northerly of these Districts, Dárjíling, contains the sanatarium of the same name, which was ceded to us by the Raja of Sikkim in 1835, and supplied the nucleus around which the present District has been formed. Among its wooded spurs and valleys European enterprise has found a lucrative field for tea cultivation, and a railway will in 1877 bring its cool heights within easy reach of Calcutta. Its primitive hill-tribes furnish deeply interesting materials for the study of the Asiatic races; while its coal-fields and ores are perhaps destined to open up a new era of mining and manufacturing industry in Bengal. English capital is recruiting the scanty local population by settlements of labourers, brought for the tea gardens, under careful supervision, from the over-crowded Districts of the south-west; an organized migration which secures a higher standard of comfort for those who thus seek new homes, and which tends to mitigate the struggle of life among those who remain behind.

The more southerly of the two British Dis-

gurí, dates its existence as a separate jurisdiction only from 1869. In that year a part of the sub-montane strip, taken from Bhután in 1865, was united with a corner of our old unwieldy District of Rangpur, and formed into a new administrative unit. The territories thus amalgamated contain every variety of country, from the densely-peopled rice plain to the solitary State forest; and exhibit the rural system developed by a century of British rule, side by side with the primitive land-rights of the thinly-scattered Himálayan races.

In the Native State of Kuch Behar the contrast is even more sharply defined. This little principality entered into feudatory relations with the British in 1773, and since then has reposed under the protection of its first and only treaty, a treaty which has sufficed to keep it safe and intact amid the frontier mischances of a hundred years. It discloses the Hindu system of administration still at work, but infused with the honesty and vigour which English superintendence gives to native rule.

The territories dealt with in this volume, namely, the British Districts of Dárjíling and Jalpáigurí, and the State of Kuch Behar, contained a population, in 1872, of 1,045,322 souls, and an area, estimated for the Census of that year, of 5431 square miles. I beg to acknowledge my obligations to Mr. James S. Cotton, late Fellow of Queen's College, Oxford, for his help in compiling the Account of Kuch Behar; and to Mr. Charles A. Dollman for assistance in the Districts of Dárjíling and Jalpáigurí.

W. W. H.

1876.

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INTRODUCTORY NOTE.

WEIGHTS AND MEASURES.

THE local weights and measures are given in detail at pp. 102, 103, and 297, 387. In some instances in the following volume, these weights and measures have been converted into their English equivalents, and the native names have not been added. In such cases the reconversion from the English equivalents may be effected with sufficient accuracy in accordance with the following tables :—

MONEY.

1 pie ($\frac{1}{192}$ of an ánná) = $\frac{1}{2}$ farthing.
1 pice ($\frac{1}{4}$ of an ánná) = 1$\frac{1}{2}$ farthings.
1 ánná ($\frac{1}{16}$ of a rupee) = 1$\frac{1}{2}$ pence.

The rupee is worth, according to the rate of exchange, from 1s. 8d. to 2s.; but for conventional conversions it is taken at 2s.

WEIGHTS.

The unit of weight is the ser (seer), which varies in different Districts from about 1$\frac{1}{2}$ lbs. to 2·205 lbs. This latter is the standard ser as fixed by Government, and corresponds to the metrical kilogramme. For local calculations in Lower Bengal, the recognised ser may be taken at 2 lbs. The conversion of Indian into English weights would then be as follows :—

1 chhaták ($\frac{1}{16}$ of a ser) = 2 oz.
1 ser ($\frac{1}{40}$ of a maund) = 2 lbs.
1 man or maund (say) = 82 lbs.

LAND MEASURE.

The unit of land measure is the bighá, which varies from $\frac{1}{3}$ of an acre to almost 1 acre. The Government standard bighá is 14,400 square feet, or say $\frac{1}{3}$ of an acre; and this bighá has been uniformly adopted throughout the following volume.

I shall be grateful for any corrections or suggestions which occur to the reader. They may be addressed to me, care of the Secretary to the Government of Bengal, Calcutta.

STATISTICAL ACCOUNT

OF THE

DISTRICT OF DARJILING.[1]

DARJILING, the north-western District of the Rájsháhi Kuch-Behar Commissionership or Division, lies between 26° 30′ 50″ and 27° 13′ 5″ north latitude, and between 88° 2′ 45″ and 88° 56′ 35″ east longitude. It contains a total area, after recent trans-

[1] The principal sources from which this Statistical Account has been compiled are as follow:—(1) Answers to my five series of questions, specially furnished by Major J. M. Morton, the Deputy-Commissioner, in 1870 and 1871. (2) Report of the Forest Department of the Government of Bengal for 1870–71 and 1871–72. (3) Bengal Census Report for 1872, with subsequent District Census Compilation in 1873 by Mr. C. F. Magrath, C.S. (4) Dr. Hooker's Himálayan Journals, 2 vols., London 1854. (5) Dr. R. G. Latham's Ethnology of India, London 1859. (6) Colonel Dalton's Descriptive Ethnology of Bengal, Calcutta 1872. (7) Paper by Mr. B. H. Hodgson, on the Koch, Bodo, and Dhimál People, published in the Journal of the Asiatic Society of Bengal for 1849, Part II. (8) Journal of the Asiatic Society of Bengal for 1848, Part II. (9) Report on the Geology and Mineral Resources of Dárjíling and the Western Dwárs, by Mr. F. R. Mallet, F.G.S., published in the Memoirs of the Geological Survey of India, vol. xi. Part I. 1874. (10) Selection of Government papers regarding the Tea Industry in Bengal, Calcutta 1873. (11) Special Report on the Land Tenures of the District, by Mr. J. Ware Edgar, C.S.I., Deputy-Commissioner, dated 26th September 1874. (12) Special Report by Major Morton, Deputy-Commissioner, on the prevailing rates of rent for land growing ordinary crops, dated 20th August 1872. (13) Annual Report of the Inspector-General of Police for 1872. (14) Annual Report of the Inspector-General of Jails for 1872, with special statistics for the years 1857–58, 1860–61, and 1870, compiled in his office. (15) Annual Report of the Director of Public Instruction for 1872, with special statistics compiled for the years 1856–57, 1860–61, and 1870–71. (16) Postal Statistics for the years 1861–62, 1865–66, and 1870–71, furnished by the Director-General of Post Offices. (17) Annual Reports of the Meteorological Department for 1871 and 1872. (18) Medical Report, furnished by the Civil Surgeon of the District in 1872. (19) Annual Reports on the Charitable Dispensaries of Bengal for the years 1871 and 1872. (20) Statement of areas, latitudes and longitudes, etc., furnished by the Surveyor-General of India.

fers, according to a return by the Surveyor-General of India in January 1876, of 1234 square miles; and a total population, as ascertained by the Census of 1872, of 94,712 souls. The principal town, which is also the Administrative Headquarters of the District, is Dárjíling, situated in the lower Himálayas, in 27° 2′ 48″ north latitude, and 88° 18′ 36″ east longitude.

BOUNDARIES.—Dárjíling District is bounded on the north by the Rammán, Great Ranjít, and Tístá rivers, and by the Phupchu, Rishi, and Rangpu mountain streams, which successively mark the boundary-line between the District and Independent Sikkim; on the east by the Ne-chu and De-chu rivers, which separate the tract known as Damsáng or Dálingkot from the Western Dwárs, now included within Jalpáigurí District, and also by the Mahánandá and Galmá rivers, which separate the *tarái*, or forest-plains portion of Dárjíling, from Jalpáigurí proper; on the south by the Western Dwárs and by Jalpáigurí District, the line of demarcation being indicated by boundary pillars; and on the west by a lofty chain of hills, separating the District from the Independent State of Nepál.

JURISDICTION.—Dárjíling has undergone many changes of jurisdiction. The Morang or *tarái* portion of the present District, lying at the base of the mountainous tract, originally formed a portion of the State of Sikkim, but was conquered and annexed by Nepál. In our treaty with the latter State at the close of the war of 1816, this tract was ceded to the British Government, by whom it was made over to the Sikkim Rájá. In 1835 the nucleus of the present District of British Sikkim, or Dárjíling, was created by the cession of a portion of the hills by the Rájá of Sikkim to the British as a sanatarium. This tract is described in the Deed of Grant, dated 1st February 1835, as 'all the land south of the Great Ranjít river, east of the Bálásan, Káhel, and Little Ranjít rivers, and west of the Rangnu and Mahánandá rivers.' In 1850 a military expedition against Sikkim was rendered necessary, in consequence of the Rájá's Díwán (Prime Minister) having seized and imprisoned Dr. Campbell, the Superintendent of Dárjíling, and Dr. Hooker, while travelling in Sikkim, with the permission of Government and of the Sikkim Rájá. The expedition resulted in the stoppage of the allowance of £600 per annum granted to the Rájá as an equivalent for the cession of the hill station of Dárjíling; and in the annexation of the Sikkim Morang or *tarái*, at the foot of the hills, and that portion of the Sikkim hills bounded by the Rammán river on the

north, by the Great Ranjít and the Tístá on the east, and by the Nepál frontier on the west. In August 1866, by a Government Resolution, the hilly tract situated east of the Tístá, west of the Ne-chu and De-chu rivers, and south of Independent Sikkim, being part of the territory acquired as the result of the Bhután campaign of 1864, was added to the jurisdiction of Dárjíling, and now forms the tract known as Damsáng or Dálingkot. The revenue, magisterial, and civil jurisdictions of Dárjíling District are, and always have been, conterminous. The jurisdiction of the Court of Small Causes, the *ex officio* judge of which is the Deputy-Commissioner, and that of the Subordinate Judge's Court, is confined to the hills, and does not extend to the *tarái* or sub-montane tract.

General Aspect and Configuration of the District.—Dárjíling consists of two well-defined and distinct tracts of country: namely, that portion of the lower Himálayas which lies west of Bhután, south of Independent Sikkim, and east of Nepál; and the *tarái* or plains which lie to the south of the mountainous tract, extending as far as the northern borders of Purniah District. The upper portion of the *tarái* or plains, which lies at the base of the mountains, is chiefly covered with forest and dense jungle; the lower portion, however, is more open and cleared, and in this tract rice is the crop principally cultivated. Dr. Hooker, in his *Himálayan Journals*, states that the surface of the plains from which the Sikkim Himálayas take their rise is only three hundred feet above the sea level, the mountains rising abruptly from the plains in spurs of from six thousand to ten thousand feet, densely clothed with forest to their summits. Since Dr. Hooker's time (1849), however, the forest has almost entirely disappeared in many parts, owing to the spread of cultivation.

The following account of the physical aspects of the Sikkim hills (both Independent and British) is quoted from Dr. Hooker's *Himálayan Journals* (vol. ii. pp. 386-389). At the time of Dr. Hooker's residence in the country, only the hill station of Dárjíling, and a small tract immediately surrounding it, formed the British territory; and it was not until 1850, in consequence of the outrage by the Sikkim Darbár upon Dr. Campbell, the Superintendent of Dárjíling, and Dr. Hooker, referred to above, that the *tarái* at the foot of the hills, as well as the hill tract now known as the Dárjíling Hills, or British Sikkim, was annexed. Dr. Hooker thus describes the physical features of the Sikkim hills:—

'The main features of Sikkim are Kánchanjangá, the loftiest hitherto measured mountain in the world, which lies in its north-west corner, and rises 28,178 feet above the level of the sea' [since this was written, Mount Everest, in the Nepál hills, has been discovered to have an altitude of 29,002 feet]; 'and the Tístá river, which flows throughout the length of the country, and has a course of upwards of ninety miles in a straight line. Almost all the sources of the Tístá are included in Sikkim; and except some comparatively insignificant streams draining the outermost ranges, there are no other rivers in this part of the country but itself and its feeders, which occupy the largest of the Himálayan valleys, between the Támbar in East Nepál and the Má-chu in Western Bhután.

'An immense spur, sixty miles long, stretches south from Kánchanjangá to the plains of India. It is called the Singálilá range, and separates Sikkim from East Nepál; the waters from its west flank flow into the Támbar, and those from the east into the Great Ranjít, a feeder of the Tístá. Between these two latter rivers is a second spur from Kánchanjangá, terminating in Tendang.

'The eastern boundary of Sikkim, separating it from Bhután, is formed for the greater part by the Chholá range, which stretches south from the immense mountain of Dankiá, 23,176 feet high, situated fifty miles E.N.E. of Kánchanjangá. Where the frontier approaches the plains of India, the boundary-line follows the course of the Tístá and of the Rangpu, one of its feeders flowing from the Chholá range. This range is much more lofty than that of Singálilá; the drainage from its eastern flank is into the Má-chu river, the upper part of whose course is in Thibet, and the lower in Bhután.

'The Dankiá mountain, though five thousand feet lower than Kánchanjangá, is the culminating point of a much more extensive and elevated mountain mass. It throws off an immense spur from its north-west face, which runs first west and then south-west to Kánchanjangá, forming the watershed of all the remote sources of the Tístá. This spur has a mean elevation of from eighteen thousand to nineteen thousand feet, and several of its peaks (of which Chamiámá is one) rise much higher. The northern boundary of Sikkim is not drawn along this line, but runs due west from Dankiá, following a shorter but stupendous spur called Kánchanjhau, whence it crosses the Tístá to Chamiámá, and is continued onwards to Kánchanjangá. Though the great spur connecting Dankiá with Kánchanjangá is in Thibet, and bounds the waters that flow directly

south into the Tístá, it is far from the true Himálayan axis; for the rivers that rise on its northern slope do not run into the Tsámpu or Thibetán Brahmaputra, but into the Aran of Nepál, which rises to the north of Dankiá and flows south-west for many miles in Thibet, before entering Nepál and flowing south to the Ganges.

'Sikkim, thus circumscribed, consists of a mass of mountainous spurs, forest-clad up to twelve thousand feet. There are no flat valleys or plains in the whole country, no lakes or precipices of any consequence below that elevation, and few or no bare slopes, although the latter are uniformly steep. . . . Viewed from a distance on the plains of India, Sikkim presents the appearance—common to all mountainous countries—of consecutive parallel ridges, which run east and west. These are all wooded, and are backed by a beautiful range of snowy peaks, with occasional breaks in the foremost ranges through which the rivers debouch. Any view of the Himálayas, especially at a distance sufficient for the remote snowy peaks to be seen overtopping the outer ridges, is, however, rare, from the constant deposition of vapours over the forest-clad ranges during the greater part of the year, and the haziness of the dry atmosphere of the plains in the winter months. At the end of the rains, when the south-east monsoon has ceased to blow with constancy, views are obtained sometimes from a distance of nearly two hundred miles. From the plains the highest peaks subtend so small an angle, that they appear like white specks very low on the horizon, tipping the black lower and outer wooded ranges, which always rise out of a belt of haze, and, probably from the density of the lower strata of atmosphere, are never seen to rest on the visible horizon. The remarkable lowness on the horizon of the whole stupendous mass is always a disappointing feature to the new-comer, who expects to see dazzling peaks towering in the air. Approaching nearer, the snowy mountains sink behind the wooded ones, long before the latter have assumed gigantic proportions; and when they do so, they appear a sombre, lurid, grey-green mass of vegetation, with no brightness or variation of colour. There is no break in this forest caused by rock, precipices, or cultivation; some spurs project nearer, and some valleys appear to retire farther into the heart of the foremost great chain that shuts out all the country beyond.

'From Dárjíling, the appearance of parallel ridges is found to be deceptive, and due to the inosculating spurs of long tortuous ranges that run north and south throughout the whole length of Sikkim,

dividing deep, wooded valleys which form the beds of large rivers. The snowy peaks here look like a long east and west range of mountains, at an average distance of thirty or forty miles. Advancing into the country, this appearance proves equally deceptive, and the snowy range is resolved into isolated peaks situated in the meridional ridges; their snow-clad spurs, projecting east and west, cross one another, and being uniformly white, appear to connect the peaks into one grand unbroken range. The rivers, instead of having their origin in the snowy mountains, rise far beyond them. Many of their sources are upwards of a hundred miles in a straight line from the plains, in a very curious country, loftier by far in mean elevation than the meridional ridges which run south from it, yet comparatively bare of snow. This rearward part of the mountain region is Thibet, where all the Sikkim, Bhután, and Nepál rivers rise as small streams, increasing in size as they receive the drainage from the snow-covered parts of the ridges that bound them in their courses. Their banks, between eight thousand and fourteen thousand feet of elevation, are generally clothed with rhododendrons, sometimes to the almost total exclusion of other woody vegetation, especially near the snowy mountains, a cool temperature and great humidity being the most favourable conditions for the luxuriant growth of this genus.'

With regard to the scenery of the sanatarium of Dárjíling itself, Captain J. D. Herbert, late Deputy Surveyor-General of India, gives the following description in the Indian *Gleanings of Science*, vol. ii. p. 114:—'Dárjíling is situated on the south side of a large hollow or basin, being that of the Great Ranjít river, which falls into the Tístá a few miles to the east of the Station. To the north the view is open, and exhibits the usual succession of range beyond range, all irregularly ramifying in every direction, and in apparently inextricable confusion. It terminates in the snowy range, which is here equally as magnificent as in the Himálayas in the north-west. To the westward, the view is confined by a lofty range at the distance of about ten miles.' [The Deputy-Commissioner is of opinion that this distance is underrated, and puts the distance of the nearest peaks at about twenty miles from Dárjíling, the farthest ones being as much as forty miles distant by the road.] 'Intermediate is a low ridge connected with that of Garjlá' [Gúm Pahár?], 'which is again a part of the Sinchál mountain. On the top of this ridge is the small village of Changtang, separated from

Dárjíling by a deep valley. To the eastward appears the valley of the Tístá, marking the boundary of Sikkim and Bhután' [written before the annexation of the hilly tract east of the Tistá], 'and on each side of it is the same confused congeries of mountain ridges as in the north of the District. Above the head of the Tístá may be seen the opening of the Pherí Pass. To the left of it, the high peak of Chumlháriá is visible, and west of it is Kánchanjangá.'

The Deputy-Commissioner describes the scenery in various parts of the District as 'indescribably magnificent, the view of the snowy mountains from the heights of Phalálum and Subargum in the cold season being one of unsurpassable beauty. A jagged line of snow connecting the two highest mountains in the world, Everest and Kánchanjangá, dazzles the eye; and while the deep silence around impresses itself on the spectator, the thick clumps of pine forest, with their wide-spreading arms, add a weird solemnity to the scene.'

Of the *taráí* or plains of the District lying along the base of the mountainous tract, the upper portion nearest the hills is mostly covered with forest and jungle suitable for cotton cultivation. It has a very fertile soil, and is chiefly inhabited by the Mechs and Dhimáls, two tribes who are said not to suffer from the unhealthy nature of the climate, but who nearly always fall ill on leaving their homes for the open country. The lower *taráí* is more open and cleared, and has also a very fertile soil, in which the principal cultivation is rice; it is chiefly inhabited by the Koch tribe.

MOUNTAINS.—As mentioned above, the whole of the northern tract is one mountainous region, without plains or table-land. The principal peaks within British Sikkim, or Dárjíling, are those which are situated on the eastern frontier of the District bordering upon Nepál, in the Singálilá range. The highest of these are the following:—(1) Phalálum, otherwise called Phalut, height 12,042 feet; (2) Subargum, height 10,430 feet; (3) Tanglu, height 10,084 feet. The first of these mountains is of a conical shape, but on the summits of the two last named some extent of undulating land is found. (4) Situng is another bold peak in the District, of a conical form, situated to the south-east of the Station of Dárjíling. (5) Sinchál Pahár is a long undulating range, a spur of which stretches gradually down to the Tístá, at the top of which, at a height of 8607 feet above the sea level, there are barracks for a European regiment. This hill is the highest mountain in the immediate vicinity of the station; its peaks are locally known as the Bará and

Chhotá Durbín. The Sinchál hill and the Gúm range, lying to the south of the sanatarium, protect it in a great measure from the prevailing winds from the south-east. The summits of these mountains are covered with grass, and their sides are clothed with forest trees, bamboos, ferns, and scrub jungle. All the mountains named above, and indeed nearly all the hills in the District, are capable of being ascended by beasts of burden. (6) The Station of Dárjíling itself has an altitude of 7167 feet above sea level, and can be ascended by means of carriages along a good road leading from the plains. This road is some forty miles in length from Siliguri in the *tarái*, where it first enters the District, to Dárjíling Station. Its maximum gradient does not exceed 1 in 25.

River System.—There are no rivers in Dárjíling District which are navigable throughout the year by trading boats of 100 *maunds* or four tons burden. The principal rivers are the Tístá and Mahánandá, which with their numerous affluents form the main drainage of the country.

The Tista takes its rise in Chalámu Lake in Thibet; it is also said to have another source below Kánchanjangá in Independent Sikkim. After passing through and draining Independent Sikkim, the river touches the British District of Dárjíling on its northern frontier, marking the boundary between Dárjíling and Sikkim for some distance, till it receives the waters of the Great Ranjít, when it turns to the south, and after flowing through the hill portion of the District, passes through Jalpáiguri and Rangpur Districts, and finally falls into the Brahmaputra below Bagwá in Rangpur. The Tístá is not navigable by trading boats in its course through the hills, although boats roughly cut from the *sál* forests on the river bank have been taken down the Tístá from a point some eight miles above the plains. The river debouches on the plains through a gorge known as the Sivak Golá Pass; on reaching the plains the body of water is very great, and the stream has a width of seven or eight hundred yards. From this point the river becomes navigable for boats of 50 *maunds* or two tons burden; but for some distance navigation is very difficult and precarious, owing to the rapids and the numerous rocks and large stones in the bed of the river. After a very short course through the *tarái*, the Tístá passes into Jalpáiguri District, as stated above. The principal tributaries of the Tístá within Dárjíling, on its left bank, are the Ráng-chu, which falls into it on the northern boundary, and the Roli, which flows through

the north-eastern part of the District; and on its right bank, the Great Ranjít, which after flowing through Independent Sikkim joins the Tístá on the northern boundary of the District, the Rangjo, the Ráyeng, and the Sivak. The banks of the Tístá are precipitous; its bed is rocky in the hills and sandy in the plains. The summits of its banks are clothed with forests of *sál* and other trees. It is not fordable within Dárjíling District at any time of the year. It is a magnificent stream; its waters are usually of a sea-green colour, but after rain, owing probably to the admixture of calcareous detritus, they occasionally assume a milky hue. A ride along the banks of the Tístá through the Dárjíling hills, from Sivak at the base of the mountains, upwards to the confluence of the river with the Great Ranjít on the northern boundary of the District, well repays a lover of the picturesque. The thickly-wooded banks at once afford shelter from the heat, and form a scenery which charms the eye; while the stream itself, now gurgling in its rocky bed, and anon forming still, deep pools, with the background of hill stretching beyond hill, make up a grand picture of natural scenery rarely witnessed in India.

THE MAHANANDA has its source near Maháldirám hill. After leaving the hills, it forms the boundary-line between the *tarái* and Jalpáigurí to Phánsidevá, in the extreme south-east of the District. After leaving Dárjíling, the Mahánandá passes through Purniah and Maldah, and finally falls into the Ganges at Godágarí, just within the borders of Rájsháhí District. The river receives no tributaries of any importance within the limits of Dárjíling, although the New Bálásan, the Mechí, and the Chengá rivers, which all flow through the District, empty themselves on its right bank lower down, after it has passed beyond the boundary. The banks of the Mahánandá are, generally speaking, sloping; in the lower part of the *tarái* they are cultivated, but in the hills they are covered with trees and jungle. The bed of the river is rocky or sandy, according as its course lies in the hills or through the plains. During the cold weather, the Mahánandá, soon after it emerges from the hills, loses itself in the sandy soil, and does not reappear for a distance of some four miles. The river is fordable in most places throughout the District in the cold weather; and even during the rains, except immediately after a flood, it is fordable at Jálás Mauzá, Gorámárá, and Phánsidevá in the *tarái*, and at several places in the hills.

THE GREAT RANJIT enters Dárjíling District from the west, and

forms a part of the northern boundary, flowing from west to east till it joins the Tístá. Its affluents, above its point of junction with the Tístá, are the Rangnu, Chhotá or Little Ranjít, and the Rammán, which successively fall into it upon its right bank. Above the point where it receives the waters of the Rammán, the course of the Great Ranjít lies entirely in Independent Sikkim. The river, although not navigable, being purely a mountain stream, is not fordable within Dárjíling at any time of the year. It has shelving banks, generally clothed with forest, but with patches of cultivation here and there; and a stony and sandy bed.

THE RAMMAN, one of the tributaries of the Great Ranjít, takes its rise under the Phalálum mountain in the Singálilá range, which forms the western boundary of the District, separating it from Nepál. The Rammán first touches on Dárjíling in the extreme north-west of the District, whence it flows along the northern boundary from west to east until it falls into the Great Ranjít. The banks of the river are abrupt, and are mostly covered with forest and jungle. Its bed is rocky and stony, and it is not fordable at any time of the year. The principal tributaries of the Rammán within Dárjíling District are the Rátho and Srí rivers, which all take their rise within the District, and, flowing northwards, empty themselves into the Rammán on its right bank.

THE CHHOTA OR LITTLE RANJIT takes its rise under Tanglu mountain in the Singálilá range on the borders of Nepál, and flows generally in a north-easterly direction till it falls into the Great Ranjít on its right bank. The river has shelving banks, which are in several places cultivated, and elsewhere clothed in forest and tree jungle. It has a stony and a sandy bed, and cannot be forded during the rainy season, but in the dry and cold months it is fordable almost everywhere. The principal tributaries of the Chhotá Ranjít are the Káhel and Hospital *jhorá* on its right, and the Rilling and Serjang streams on its left bank.

THE RANGNU takes its rise under the Jallapahar hill, flows northwards past the Station of Dárjíling, and empties itself into the right bank of the Great Ranjít. It is a small river, and has no tributaries of any importance.

THE RATHO, a tributary of the Rammán, takes its rise below Tanglu mountain in the Singálilá range, a little to the north of the source of the Chhotá Ranjít. Its banks are shelving, and in some places under cultivation; the bed is stony. The stream is fordable,

even during the rains, after the freshet water has subsided. The principal ford is at Silingbang.

THE SRI, also a tributary of the Rammán, takes its rise below Silingbang; the banks are abrupt and jungly, with no cultivation, and the bed stony. This stream is also fordable in the rains after the subsidence of flood water. The principal ford is on the road to Subargum.

THE BALASAN river takes its rise at Jagat Lepchá, a few miles to the south-west of the Station of Dárjíling. It flows a southerly course till soon after it enters the *tarái*, when it divides itself into two streams. One, called the New Bálásan, branches off and joins the Mahánandá on its right bank just below Siliguri; the other, the Old Bálásan, continues its southward course till it passes out of the *tarái* into Purniah District. The new channel is said to have been formed about thirty years ago, by some Mechs damming up the old stream for the purpose of fishing. Writing in 1870, the Deputy-Commissioner stated that, at that time, and for about six years previously, the main stream of the river had returned to its old course. The banks of the Bálásan in the hills are chiefly covered with jungle, but in the *tarái* are fairly well cultivated; the bed is stony in the hills and sandy in the plains. The river can be forded at several places in the cold and dry months, and even in the rainy season, after flood water has subsided. The principal tributaries of the Bálásan in the hills are the Bing, Rammuk, Páchím, and Rinchítang on the left, and Rangbang on the right bank; in the plains, the Raktí, Sukhná, Rohíni, and Pánchanái, all on the left bank.

THE MECHI takes its rise under the Rangbang spur in the Singálilá range, on the Nepál frontier. This spur forms the watershed between the Mechí in Dárjíling District, and the Jangbá in Nepál. The Mechí marks the western boundary of the District from its source, flowing a southerly course till it passes into Purniah District. The banks of the river are sloping, and are well cultivated in the *tarái*, as well as in certain places in the hills. The bed is sandy in the plains and stony in the hills. The river is fordable throughout the year, except when flooded immediately after heavy rain.

THE ROLI, a tributary of the Tístá, is the most important stream in the Damsáng tract, situated to the east of the Tístá. It takes its rise under the Khampang mountain in the north-east of the District, and flows a winding south-westerly course till it falls into the Tístá.

Its banks are shelving, and covered with forest and jungle, interspersed with small patches of cultivation here and there. At certain parts the river is fordable throughout the year. Its tributaries are the Nun on its right, and the Rangnu-chu, Reri-ung, and Reung (all insignificant streams) on its left bank.

THE JALDHAKA, called in the upper part of its course the De-chu, marks the eastern boundary of the hilly tract, which it separates from Bhután State, and also from the western Bhután Dwárs now included within Jalpáigurí District. It runs a straight course from north to south. Its principal tributaries within Dárjíling District are the Parálang-chu, Rang-chu, and Ma-chu, which flow into it on its right bank.

LAKES.—Two small lakes are situated in the District. One lies about six miles south-west of Hope Town; the other, called Rámtál, on a little stream called the Rámthi *nadí*, a few miles east of the Tístá. This latter presents some features of interest, and is thus described in a Report by Mr. F. R. Mallet on the 'Geology and Mineral Resources of Dárjíling,' published in the *Memoirs of the Geological Survey of India*, vol. xi. Part I. 1874:—'As measured on the map, the lake is 550 yards long, by about 200 yards broad. For thirty or forty yards from each bank in the upper part of the lake, dead stumps of trees (which are evidently *in situ*, and not large branches of sunken drift-wood) appear above the surface of the water, indicating that the lake, if not formed, has at least increased considerably in depth, within the time that such timber can remain under and above water without falling to pieces. Charred piles below water are known to be capable of resisting decay for centuries; but trees in such a condition would no doubt rot much faster. Towards the lower end, vertical precipices rise from the lake; and here the water seems to be much deeper, too deep to allow of any stumps appearing above the surface. For more than a quarter of a mile above the lake there is a delta of slate shingle, which yearly encroaches on and diminishes the area of the water. The Lepchás have a tradition that three or four generations ago the whole of this delta formed a part of the lake; and from what I have seen of the transporting power of the hill streams, I can well believe that the present delta could have been formed in this time, especially as the upper Rámthí flows entirely through brittle, easily broken slates. The first lateral torrent above the lake on the west side contributes an immense amount of *débris* from a naked precipice at its source.

Of course the commencement of the delta must have been synchronous with the earliest existence of the lake, and although the Lepchás' account may not be strictly true, the delta is certainly not of high antiquity.

'As regards the mode of formation of this sheet of water, its recent origin puts glacial action in any form out of count, even if the low altitude, about a thousand feet above the sea, does not do so. The stream for a mile below the exit has a much greater fall (400 feet) than either farther down or above the lake; and the bed is there filled with huge blocks of tertiary sandstone, amongst and under which the water flows. I have nowhere, except here and below the Dohír tál—a similar but much smaller lakelet, about half a mile to the eastward—seen an accumulation of this kind; and it seems most probable that both lakes and blocks of sandstone are due to landslips from the hill above, which have dammed up the original bed of the stream. The blocks are all of tertiary sandstone, and hence cannot have been washed down stream, as the rocks above the lake are Dámodars and slates. For the same reason, besides those mentioned above, they cannot be the remains of a *moraine*.'

There are no canals or artificial water-courses in Dárjíling District. The number of deaths from drowning reported to the police in 1869 was eight. This number probably represents the correct loss of life from this cause, as the Deputy-Commissioner states that in that year mortuary returns were first insisted on, and that care was taken to have all deaths properly reported.

UTILIZATION OF THE WATER SUPPLY.—There are no river-side towns or large villages in Dárjíling District inhabited by a community subsisting by river traffic. None of the non-navigable rivers or streams are anywhere applied as a motive power for turning machinery, although there is an immense amount of water power in the District which is capable of being so utilized. The waters of all the rivers and streams, with the exception of the Tístá and the Mahánandá, are, in the *tarái* Sub-division, largely utilized for irrigation purposes. In the hills, the water of the smaller streams is used for irrigating cardamom gardens, and also occasionally for tea nurseries or tea plantations.

FISHERIES.—There are no exclusively fishing towns or villages in Dárjíling. The fisheries all belong to Government, and the right of fishing is annually sold by auction to the highest bidder. In 1870-71 the fisheries realized a Government revenue of £89. The

following rivers and marshes constitute the reserved fisheries in the *tarái* portion of the District:—Rivers—New Bálásan, Old Bálásan, Mahánandá, Gorámárá, Gárání, Siábhitá, Pánchnái, Chámthá, Gálmá, Rángápání, Chengá, Ruídhásá, Bhubandhobá, Pichhlá, Nedhaimárá, Demkí, Ghughu-jhorá, and Singímárí. *Bils* and marshes—Kui-jhorá, Jhenekurí, Petbishámani, Landangurá, Damdamá, and Sonáchálni. The fisheries in the hills portion of the District are the Bálásan, Chhotá Ranjít, the junction of the Rangnu with the Langming, Rámet, Rothrám, Rangjo, and Raing. The Deputy Commissioner reported in 1870-71 that not more than twenty-five families in the whole District were maintained exclusively by fishing, and that these lived at the villages of Phánsidevá on the Mahánandá, in the extreme south-east of the *tarái* Sub-division. This estimate appears to be very near the mark, as the Census Report of 1872 returns the number of Hindu boating and fishing castes in the District at 81, of whom 68 live in the *tarái* and 13 in the Hills Sub-division. Although so few people make their sole living by fishing, the Deputy-Commissioner reports that the people generally throughout the District fish for themselves during their spare hours.

Land Reclamation: Marsh Cultivation, etc.—There being abundance of spare land in the District still available, no river or marsh land has as yet been reclaimed for the purpose of extending cultivation. The Deputy-Commissioner states that there is no land in the immediate vicinity of the rivers which is capable of being so reclaimed, but that a good deal of marsh land in the *tarái* Sub-division might with great advantage be drained. One such marsh, the Dalgár *jhár* and the land in its immediate vicinity, is considered very unhealthy, and affords a thick cover of jungle to elephants and other wild animals, which do great damage to the crops. Mr. Lloyd, a banker of Dárjíling, and himself a considerable landholder in the *tarái*, has offered to reclaim this tract, if it is granted to him on lease for a period of thirty years. The matter was under the consideration of Government in 1870. It is not probable that any of the marshes in the District could be advantageously utilized as reed or cane producing grounds. Abundance of cane grows indigenously in the Hills Sub-division. Long-stemmed rice is not grown in the District.

Lines of Drainage.—The lines of drainage in the District are the Tístá and Mahánandá and their tributaries, except in the extreme east, where the superfluous water is carried off by the

Jáldhaká. The great watershed of the District is the Singálilá range, said to be sixty miles in length, reaching from Kánchanjangá, in Independent Sikkim, to the plains of Bengal. At its northern extremity this range suddenly all but terminates in a huge precipice. It is joined to Kánchanjangá by a narrow saddle-back-shaped ridge. The Gúm range, which joins the Singálilá hills below Tanglu, forms a subsidiary watershed line. The waters on the south and west of this line all drain eventually into the Mahánandá, whilst those to the north and east find their way into the Tístá.

MINERALS.—Dárjíling District abounds in mineral wealth. Coal has been known to exist for many years past. It was first noticed by Dr. Hooker near Pankhábárí in 1849, and has since been discovered in many localities in the hills. Samples of the coal have been from time to time forwarded to Calcutta for analysis with favourable results; but the supply has not hitherto been utilized. The connection of Calcutta with the Dárjíling hills by means of the Northern Bengal State Railway has recently, however, given a new importance to the question of the existence of coal in these parts; and in the cold weather of 1873 a thorough survey of the District was undertaken by the Geological Department, particularly with a view to the examination of the coal-bearing strata. The results of this examination, as showing the different coal-bearing tracts, the quality of the coal, and the probability of its profitable utilization, will be detailed in a subsequent section of this Account (pp. 129–140). A little iron is also manufactured, and copper mining is carried on to a somewhat greater extent; but the methods of mining and smelting adopted by the natives are of a very primitive kind. Lime is obtained in large quantities from calcareous tufa by burning, and several quarries of this stone are worked. Building stone is abundant, and slate of a somewhat inferior quality, but suitable for flooring purposes, is found in the tract to the east of the Tístá. A detailed account of these mines and quarries, and of the mode of working, will be given in a subsequent section (pp. 140–158). So-called salt-licks are frequent. Mr. Mallet, in his Geological Report already cited, states that 'they occur chiefly where there are seams of coal interstratified with sandstone, etc., and are resorted to by wild animals for the sake of the saline matter, which effloresces to a slight extent on the surface of the beds. The ground is trodden down into a black mud by deer, rhinoceros, and elephants, the last of which dig out the coal with their tusks to a depth of several feet. The

efflorescence is not of common salt, but of sulphate of soda, which is probably formed by the oxidation of a trace of pyrites in the coal, and the reaction of the resulting sulphate of iron on soda washed out of the felspar 'which sometimes forms an ingredient of the sandstones.'

CAVERNS, NATURAL PHENOMENA, ETC.—There are several caverns situated in the hills, the most important of which, near the Cutcherry (Kachárí) hill in the Station of Dárjíling, is superstitiously believed by the natives to extend subterraneously as far as Lhássá in Thibet! The Rammán river is crossed by a natural bridge of stone between the junction of the Rátho and Srí with that river. With the exception of the Sivak Golá Pass, through which the Tístá river debouches on the plains, there are no gorges or passes in the District; but every valley and every turn of the road within the hills is highly picturesque. The following description of a hot spring and a mineral spring is quoted from Mr. Mallet's Geological Report:—

'Hot springs are known to exist in Independent Sikkim, but the only indication of such in the Dárjíling District that I could hear of was at the Mangphu copper mines on the Tístá. About six hundred feet above the river, there are two or three small clefts in the slate, the air in which feels warm and moist to the hand, and "clouds" are said to issue from them morning and evening, when no doubt the vapour is condensed by the coldness of the air. The clefts are encrusted here and there with sulphate of copper, derived from the decomposition by the moist air of the specks of ore in the cupriferous slates. There is probably a warm spring here, the water of which trickles away through the crevices of the rock and the loose *débris*, without reaching the actual surface of the ground. The geographical co-ordinates are north latitude 26° 58′, east longitude 88° 29′ (= 88° 25½′ according to Admiralty value), elevation above the sea about 1300 feet.

'The "mineral spring" about three miles east of Dárjíling Station is well known, and was formerly utilized for medicinal purposes, a convalescent depôt having been built near for the convenience of the troops stationed at Jallápahár. The water, however, is not used at present, and the depôt has gone to ruin. The spring was also used by the hill-men for rheumatism and cutaneous diseases, the patient being placed in a rude bath made of plantain stems, the water in which had previously been heated by throwing hot stones into it; the water was also taken internally. The spring rises amongst the

boulders in the bed of a lateral feeder of the Rangnu, which is now (4th May) dry above this point; the water issues at 62° Fahr., and trickles away in a little rivulet, which deposits ochre in small quantities, but has no appreciable taste or smell. It is said to have formerly had a sulphureous odour when used for medicinal purposes. North latitude 27° 2½′, east longtitude 88° 22′ (88° 18½′ according to Admiralty value), elevation 2050 feet. No *hot* spring is known in this vicinity.'

FORESTS AND VEGETATION.—There are several important revenue-yielding forests in Dárjíling District, which are conserved and placed under charge of the Forest Department. The total area of these reserved forests was returned by the Deputy-Commissioner in 1870 at about 120 square miles. The forest reserves in the Dárjíling *taráis* are the following:—(1) Mechí forests; (2) Lohárghar *taráis;* (3) Bálásan; (4) Garídhárá; (5) Thyanok, Nunmatí, and Rángámátí; (6) Murgáo *jhárs;* (7) Chámpásarí *jhárs;* and (8) Dhálká *jhár.* The following description of each of these tracts is quoted from the Report of the Assistant Conservator, published in the Bengal Forest Administration Report for 1871-72:—

(1) '*Mechí* forest covers an area of 1183 acres, and contains very little timber of value or size. It has only about five hundred full-grown trees of *sisu* and *khayer*—not more than fifty of the latter. This tract is on the banks of the river Mechí, and is low, flat, sandy, and stony. It is more or less inundated yearly.

(2) '*Lohárghar taráis* is at the foot of the Lohárghar hills. It contains no timber of any kind, and is a small tract, slightly hilly. It has a sandy soil, with very heavy grass jungle.

(3) '*Bálásan;* a *sisu* and *khayer* forest, on the banks of the Bálásan river. On this tract, which is almost the same as No. 1, there is little or no full-grown timber. It contains more *khayer* than *sisu.* Timber on this tract, and also on No. 1, never grows to any great size, and many of the trees are hollow. This is caused by the floods carrying down stones and rocks, which hurt the young trees by knocking off the bark; the trees then rot.

(4) '*Garídhárá;* a very small patch of *sisu* and other jungle, on the banks of the Rakhtí river and near the slopes of Báhmanpukhurí. It has a few full-grown trees on it—about a hundred. This tract is a flat, sandy piece of land, and is really the old bed of the Rakhtí.

(5) '*Rángámátí* is a tract extending from the Rohní *jhorá* to

Sukhná, on the new cart road. It is a narrow strip of about 1850 acres, containing a few young *sál* trees, but no matured timber of any kind. The broadest part of the tract near Sukhná is sandy about a foot below the surface, which is itself composed of dark, rich-looking soil. Near the Rohní the land is low and damp; near the Rangthang river it is high and well drained, but covered with heavy grass jungle and common jungle trees.

(6) '*Murgáo jhár.*—This tract extends from Sukhná on the cart road to the Mahánandá river at the foot of the hills. It is well-drained land for the most part, and has a very rich soil. In character it is the same as No. 5; heavy grass jungle with a few young *sál* trees on it, but no matured timber. All the large trees were cut down some years ago by a contractor. Many patches of this tract, as also of No. 5, have been in former years cleared and cultivated by Mechs, a very wild and uncivilised race of people, who wander from place to place, never stopping for more than two years in one spot.

(7) '*Chámpásarí jhár.*—This tract of country runs from the Mahánandá to Sivak on the Tístá. It has no matured timber on it. All the full-grown trees, or timber of any size, have been cut. About one-half of this tract, which comprises a total area of 7557 acres, is complete waste, with nothing on it but here and there a few patches of young *sál*. The land is rich, and is for the most part well drained. The soil is the same as Nos. 5 and 6, till near Sivak, where a long strip of land is met with, adjoining the Báikanthpur forests of the Jalpáigurí Rájá. This strip is stocked with fine *sál* about three-parts grown. The land is very well drained, high and sandy, with a dark soil on the top. From this patch a large supply of timber may be obtained some thirty years hence. As the ground gets higher, the *sál* becomes better and of a larger size. Adjoining this tract, at Sivak *jhár*, a strip of land runs down by the bank of the Tístá, which has little or no timber on it. There may be in all some hundred young *sál* trees and a few *sisu*, but none of any size.

(8) '*Dhálká jhár.*—This tract, comprising 5059 acres, contains no timber of value for present felling; a large portion of it is low and swampy, with heavy masses of valuable cane-brake. It will, however, probably become of considerable value hereafter, if closed for forty or fifty years, as most of the *tarái sál* forests require to be, owing to their having been almost completely cleared

of all mature timber by contractors, who made large fortunes previous to the introduction of forest conservancy.'

The Hills Sub-division contains the following forest tracts:—(9) Mahâldirám, from Jhor bungalow to Karsiáng; (10) Pánchar, from Rángírum to Gorámárá hills; (11) Outer hills, from Rangthang to the Tístá river; (12) Merig; (13) Lohárghar.

(9) '*Mahâldirám* tract is well stocked with timber of all kinds,—oak, magnolia, chestnut, etc., oak trees being the most numerous. Some of this timber is fully matured, and will never be better than it is now. At present, however, there is no market for the timber in this range of hills, and it is impossible to remove it to any distance without a very great outlay of money. A number of trees, principally chestnut, are sold yearly to contractors, who remove them themselves.

(10) '*Pánchar* is a large tract of forest very well stocked with timber, such as *chalaoní*, *tún*, *sál*, etc., and with a few chestnuts, oaks, and magnolias on the upper ranges; but it is almost impossible to have them removed. At present the timber is only useful for shingles and light scantlings, which natives cut on the spot and carry to market, or supply for house-building, etc. to private persons. The lower range of Pánchar, which comes down to the head of the Mahánandá, is very rich in *tún*, *sál*, *arjún*, etc. This timber could be brought down the bed of the Mahánandá, if a small cart track was made to the foot of the hills or the head of the river; but as there is now no market for timber, I would not recommend any felling of timber in Sikkim at all. *Tún* is generally sold on the spot where it stands, and is cut up and removed in planks, etc. for tea-boxes by the purchasers, which is practically the only use *tún* is put to in this District.

(11) '*Outer hills*, from Rangthang to the Tístá river. These hills, which lie over Sivak, and run to Sukhná and up to Sindhárí, are well stocked with *sál*, *tún*, and other trees, except on the lowest slopes at Sivak *jhár*, and on the west of the Mahánandá, where all full-grown *sál* has been cut. It is impossible to form an estimate of the supply these hills might yield, as no regular survey of them has been made; but there is no doubt that a very large supply is available, if there were only means by which it could be removed. The hills from Sivak up the valley of the Tístá, joining Pánchar on the west, have had nearly all the good *sál* cut by the Forest Department in 1869, and by the villagers to the east of Mahâldirám

and along the banks of the Tístá as far as Rayang. Timber cannot be removed, except in the shape of planks, shingles, scantlings, etc., as there is a valley or gorge which renders it difficult, if not impossible, to get the timber to the Tístá or Mahánandá.

(12) '*Merig* is a small tract of hills without any timber of any kind on it at present, but it would do well for planting purposes.

(13) '*Lohárghar hills.*—This tract has some fine young *sál* on it, but very little matured timber; it would not give more than about a hundred full-grown trees. The *sál* on this range of low hills is not so good as on the other hills of this District. It looks well, but is spongy and soft. I am of opinion that it would be useless to try to improve these hills, beyond strictly preserving them from fires, villages, large herds of cattle, *báthán*s, etc.'

Forest plantations have been laid out by Government at Rangbul, Báhman-pukhuri, and at Dhobí *jhár* on the Maháldirám. The total area of the Government reserved forests in Dárjíling District is 44,800 acres, scattered over an area of about 700 square miles.

INDIA-RUBBER of excellent quality was collected from the Dárjíling forests in 1870-71. The cost of collection was only Rs. 12 per *maund*, or £1, 12s. 9d. per hundredweight, as compared with Rs. 25 to Rs. 30 a *maund*, or £3, 8s. 3d. to £4, 2s. 0d. a hundredweight, which is paid by the contractors in Assam. About 45 *maunds* or 33 hundredweights were despatched to Calcutta for sale during the year, of which the sample sent to the brokers was valued at Rs. 45 per *maund*, or £6, 3s. 0d. per hundredweight. Next season the operations were extended. The Report of the Forest Department for 1871-72 gives the result as follows:—'A great improvement has taken place in the collection of india-rubber this season, as stringent orders were issued to compel the collectors to keep it quite free from any mixture with chips, earth, or other foreign matter. The result has been that the gum has fetched as much as Rs. 64 per *maund*, or £8, 14s. 10d. per hundredweight, and has been pronounced the purest which has come to market. Tapping was only allowed for four months, viz. from 15th November 1871 to 15th March 1872. Information has lately been received to the effect that the success attending the collection in the Government forests has stimulated others to employ men in collecting beyond British territory. It is estimated that there are about six thousand india-rubber trees on the west side of the Tístá, and about the same number on the east bank

as far as the Chel river. Of these about one-half are of the small-leaved kind, which gives only half the quantity of milk yielded by the large-leaved variety. An ordinary-sized tree (large leaf) gives about 15 *sers* (30 lbs.) of milk, which, when dry as india-rubber, is reduced to 8 *sers* (16 lbs).'

TREES AND SHRUBS.—The principal trees, etc. found in the Dárjíling hills, and the localities in which they best flourish, are, according to Dr. Hooker and other authorities, as follow:—(1) From twelve thousand to ten thousand feet above the sea are found firs (Abies wabbiana), dwarf rhododendron, aromatic rhododendron, and several other varieties of rhododendron; juniper, holly, arboreous rhododendron, red-currant bushes, cherry, pear, Daphne or paper tree, Potentilla, creeping raspberry, Hypericum, Ranunculus, Geranium, Veronica, Polyanthus, buff and lilac primrose, violet, dock, Aconitum, Palmatum or *bís* plant, from the root of which a deadly poison is extracted; dwarf *chhím* bamboo, iris, blue and white anemone, Arisœma, balsam, heart's-ease, Carex moss, lichens, etc. (2) From ten thousand to nine thousand feet are found the oak, chestnut, magnolia, arboreous rhododendron, Michelia or *champá*, olive, fig (Ficus gooloorea), laurel (Cinnamonum cassia), barberry, maple, nettle, lily of the valley, *chhím* bamboo, rue, rhubarb, Andromeda, Celastrus, white rose, etc. (3) At a height of from nine thousand to eight thousand feet are found the magnolia, maple, rhododendron, oak, laurel, lime, dogwood, Vibernum, Hydrangea, Heliongia, ginseng, Symplocus, Celastrus, and Vaccinium. (4) From eight thousand to six thousand five hundred feet are found the elder, peach, oak, chestnut, maple, alder, Michelia, olive, walnut, *tún*, Hydrangea, birch, holly, Erythrina, magnolia, all the English kinds of flowers, rue, three kinds of raspberry, strawberry, rhubarb, potato, Hypericum, many kinds of Polygona, which forms the principal underwood at Dárjíling; wild ginger, Osbeckia, bramble, Thunbergia, and wormwood. (5) From six thousand five hundred to four thousand feet are found the following:—The first-named height is the highest limit for palms; alder, oak, maple, birch, acacia, Dalbergla, Terminalia, tree fern, plantain, wild vine, Bignonia, holly, elder, cherry, olive, Hydrangea, pear, pepper, Menisperma, Heliongia, pendulous mosses, lichens, arums of many kinds, Arisœma, Calami or rattan, Caryota palm, Aquilaria, Myrsine, Embelia, Ardisia, and Sonneratia. Five thousand feet is about the highest limit for rice cultivation; barley, two species of buckwheat, *mahuá*, Indian corn, *janirá*,

yam, *brinjál*, *bhanj*, fennel, cummin, mint, and rue. (6) From four thousand to one thousand feet are found Gordonia, *pandanus*, *sál*, *tún*, Bombax or cotton tree, banian fig, orange, peach, pine (Pinus longifolia), banana, lemon, wormwood twelve feet in height, etc. (7) From one thousand feet down to the plains are figs of five kinds, dates, Wallichia, Caryotides, Cycas pectinata, twelve kinds of bamboo, Phylanthus emblica, Grislea, Marlea, Sterculia, Trophis, *sisu*, Butea, Mimosa, Catechu, Rotlera, Terebinthaceæ, Symplocus, climbing Leguminosa, Cucurbitaceæ, wild mulberry, three kinds of nettle, Bœhmeria, Euphorbia, turmeric, ginger, many kinds of grass, some twenty feet in height, orchids, ferns, Rondeletia, Randia, etc. In the plains or *tarái* Sub-division, the forest trees principally met with are *sál*, *sisu*, *sisun*, and *chilauní*.

JUNGLE PRODUCTS.—The principal jungle products found in Dárjíling District are as follow:—In the hill tracts—rhubarb; Aconitum; Palmatum or *bís*, from the root of which a deadly poison is extracted; *manjit*, which yields a red dye; india-rubber (already mentioned, p. 36); *pangyá*, a root with medicinal properties, used in cases of fever, with a strong bitter taste like *chiretá*; *tarulbuk*, a yam of which three species are found in the Dárjíling hills. These are an excellent substitute for potatoes, and the Deputy-Commissioner reports that they are so abundant that the population could almost entirely subsist on them in event of famine. *Deh* (Daphne), a plant from the bark of which a paper is made by the Nepálís; cardamoms; beeswax; *punyá*, a thistle which produces a strong silky fibre, from which it is said a fabric can be manufactured equal, if not superior, to grass cloth; it is not very abundant, but could doubtless be propagated extensively. *Sisnu*, another thistle which is found in great abundance, and from which the Deputy-Commissioner reports that excellent cloth can be manufactured. The jungle products of the *tarái* or plains Sub-division are the following:—Lac; *adrá*, from the fibres of which ropes are made; *dár haldí*, from the roots of which a red dye is extracted. Orchids and ferns may also be included among the wild vegetable productions of the District which possess a marketable value. The Deputy-Commissioner states that a botanist or professional gardener, acquainted with the art of packing plants in Wardian cases so as to ensure their reaching Europe in safety, might realize a handsome income by collecting and sending to England the orchids and ferns of this District.

PASTURE GROUNDS.—The principal pasture grounds in Dárjíling are the reserved Government forests, and in the rains the highest mountains. The right of pasturage on Government land is rented by the Forest Department, and yields an annual income of about £115. The Gurungs, a tribe of Nepálís, annually depasture large flocks of sheep in this District, taking them to the heights in the rains, and in the cold weather bringing them down to the plains for sale. The Gháliás, a Nepálí tribe, and the Bhutiás and Lepchás, depasture large herds of buffaloes and cows indiscriminately. The Mechs in the plains, and the Nepálís in the Hills Sub-division of the District, collect and trade in jungle products, but this is merely made a subsidiary occupation to that of agriculture.

FERÆ NATURÆ.—No kind of game is very abundant in the hilly tract. Among the larger descriptions found are bears, large and small leopards, and musk deer on the higher mountains; large deer (*sambhár*) on the lower ranges; and a few elephants and tigers on the slopes above the plains. In the *tarái* Sub-division, tigers, rhinoceros, deer, wild hog, and a distinct species of wild pig, called *náphá* by the natives, are all pretty abundant. A few wolves are also found. The expense incurred in 1869 in keeping down wild animals amounted to Rs. 317. 8. 0 or £31, 15s. 0d., paid in the shape of rewards for their destruction. The amount paid during the five preceding years had averaged considerably less. The increase is due to the fact that it was found necessary in 1869 to materially augment the rates which were previously paid for the destruction of wild animals. The reward for killing a tiger is now Rs. 20 or £2; previous to 1869 it was Rs. 5 or 10s.: the reward for a leopard is now Rs. 10 or £1; formerly it was Rs. 2. 8. 0 or 5s.: the rate for bears is, and has always been, Rs. 2. 8. 0 or 5s. per head. The reward for the destruction of a wild elephant is Rs. 10 or £1, and for a rhinoceros, Rs. 5 or 10s.; previous to 1869 no rewards were given for the destruction of these latter animals. No rewards have ever been paid for the destruction of venomous snakes. Among the smaller varieties of game found in the District, hare, jungle-fowl, peacock, partridge, snipe, woodcock, wild duck, wild geese, and green pigeon are numerous in the *tarái* Sub-division. Jungle-fowl and pheasants are met with in the hills. Among fishes, the *mahsír* is found in the Tístá; and the *saul*, *sál*, *boyál*, *rangí*, *ruhí*, *tor*, *agar*, *khársilá*, *dekár*, *báyes*, and *urantá* exist in all the rivers. No trade is carried on in the skin of wild animals, but Thibetán traders purchase the hides of domesticated buffaloes.

POPULATION.—Prior to 1872, no attempt was ever made towards an enumeration of the population of the entire District. In 1869 a Census was taken of the inhabitants within the limits of the Dárjíling Municipality, which correspond to those of the tract originally ceded by the Rájá of Sikkim to the British Government as a sanatarium in 1835. The result gave a total of 22,607 persons, made up as follows:—Male adults 11,643, male children 3123; total males 14,766: female adults 5200, female children 2641; total females 7841: grand total, 22,607 persons. The area of Dárjíling Municipality is returned at 88,320 acres, and in 1869 contained 2223 houses, showing an average of 10·17 souls to each house, or 3·90 per acre. The 11,643 male adults were classified as follows:—125 Europeans, 14 Eurasians, 3 native Christians, 9881 Hindus, 727 Muhammadans, 300 Lepchás, 582 Bhutiás, 1 Chinaman, 2 Maghs, 1 Madrásí, and 7 Armenians. The Census thus taken for this tract is believed to be fairly accurate, as the individuals were actually counted.

A regular Census of the entire District was taken by authority of Government in the cold weather of 1871-72. Owing to the difficult nature of the country, the absence of regular villages, and the scattered population, it was found impossible to attempt a simultaneous census, and the ascertained results were arrived at by a gradual enumeration, which lasted nearly throughout the cold weather. The Bengal Census Report thus describes the mode adopted in taking the Census:—'In Dárjíling, with the exception of the Headquarters Station and Karsiáng, and the coolie lines on the various tea plantations, there are no villages in the proper sense of the term. The people live in their separate enclosures near their patches of cleared cultivation, but often at a considerable distance from each other; and as, owing to the difficult nature of the country, much time and labour is expended in passing from one enclosure to another, a census to be taken in one night would involve the appointment of an enumerator to almost every enclosure—an arrangement which the illiterateness of the people renders a sheer impossibility. The District was carefully mapped out by the Deputy-Commissioner and divided into four well-defined tracts, which, for purposes of supervision, were distributed between himself and his immediate subordinates. The Census was effected by trustworthy men, who had certain blocks of land assigned them, and whose business it was to see that no house within their respective blocks

escaped enumeration. On tea plantations, the returns were filled up by the garden *munshís*, the planters themselves readily giving their assistance in supervising and verifying the accuracy of the returns.' With regard to the accuracy of the Census, the Deputy-Commissioner is of opinion that the returns are fairly accurate for the old hill territory of Dárjíling, but that they are incorrect for the *tarái* Sub-division and for the Damsáng tract to the east of the Tístá.

The total cost of taking the Census of Dárjíling District amounted to £55, 10s. 0d.

The results disclosed a total population of 94,712 souls, namely, 53,057 males, and 41,655 females, dwelling in 18,864 houses; average density of the population, 77 per square mile; average number of inmates per house, 5·0. The table on the following page, exhibiting the area, population, etc. of each of the three police circles (*thánás*) of Dárjíling, is quoted from Mr. C. F. Magrath's separate District Compilation for Dárjíling.

POPULATION CLASSIFIED ACCORDING TO SEX, RELIGION, AND AGE.—The total population of Dárjíling District consisted in 1872 of 94,712 souls, viz. 53,057 males, and 41,655 females. The proportion of males in the total population is 56·0 per cent., and the average density of the population 77 per square mile. Classified according to religion and age, the Census returns show the following results:—Hindus—under twelve years of age, males 12,116, and females 9913; total, 22,029: above twelve years, males 27,065, and females 20,737; total, 47,802. Total of Hindus of all ages, males 39,181, and females 30,650; grand total, 69,831, or 73·7 per cent. of the total District population; proportion of males in total Hindu population, 56·1 per cent. Muhammadans—under twelve years of of age, males 1006, and females 787; total, 1793: above twelve years, males 2569, and females 1895; total, 4455. Total of Muhammadans of all ages, males 3566, and females 2682; grand total, 6248, or 6·6 per cent. of the District population; proportion of males in total Musalmán population, 57·1 per cent. Buddhists—under twelve years of age, males 215, and females 206; total, 421: above twelve years, males 576, and females 371; total, 947. Total of Buddhists of all ages, males 791, and females 577; grand total, 1368, or 1·5 per cent. of the District population; proportion of males in total Buddhist population, 57·8 per cent. These figures are taken from the General Census Report. The separate District

[*Sentence continued on page* 43.

ABSTRACT OF AREA, POPULATION, ETC. OF EACH POLICE CIRCLE (THANA) OF DARJILING DISTRICT, 1872.

Subdivision.	Thánd.	Area in square miles.	Number of villages, *mauzás* or townships.	Number of houses	Total population	Averages calculated from preceding columns.		
						Persons per square mile	Houses per square mile.	Persons per house.
Sadr or Headquarters Sub-division,	Dárjíling, . . .	960	...	5,549	34,482	49	8	6·2
	Karsiáng, . . .		...	2,204	12,245			5·5
	Total, .	960	.[1]	7,753	46,727	49	8	6·0
Tarái Sub-division,	Tarái, . . .	274	19	11,111	47,985	175	41	4·3
	Grand total, .	1234	19	18,864	94,712	77	15	5·0

[1] There are no villages or *mauzás*, properly speaking, in the Hills Sub-division.

Sentence continued from page 41.]
Census Compilation of Mr. C. F. Magrath, in its ethnical distribution of the people, quoted on a subsequent page, returns the number of Buddhists at 3433. Christians—under twelve years of age, males 72, and females 78; total, 150: above twelve years, males 246, and females 160; total, 406. Total of Christians of all ages, males 318, and females 238; grand total, 556, or ·6 per cent. of the District population; proportion of males in total Christian population, 57·2 per cent. Other denominations not separately classified (including many Buddhists not returned separately)—under twelve years of age, males 3063, and females 2798; total, 5861: above twelve years, males 6138, and females 4710; total, 10,848. Total of 'others' of all ages, males 9201, and females 7508; grand total, 16,709, or 17·6 per cent. of the District population; proportion of males in total other population, 55·1 per cent. Population of all religions—under twelve years of age, males 16,472, and females 13,782; total, 30,254: above twelve years, males 36,585, and females 27,873; total, 64,458. Total population of all ages, males 53,057, and females 41,655; grand total, 94,712: proportion of males in total District population, 56·0 per cent.

The percentage of children not exceeding twelve years of age, in the population of different religions, is returned in the Census Report as follows:—Hindus—proportion of male children 17·3, and of female children 14·2 per cent.; proportion of children of both sexes, 31·5 per cent. of the total Hindu population. Muhammadans—male children 16·1, and female children 12·6; proportion of children of both sexes, 28·7 per cent. of the Muhammadan population. Buddhists—male children 15·7, and female children 15·1 per cent.; proportion of children of both sexes, 30·8 per cent. of the Buddhist population. Christians—male children 13·0, and female children 14·0 per cent.; proportion of children of both sexes, 27·0 per cent. of the Christian population. Other denominations—male children 18·3, and female children 16·8 per cent.; proportion of children of both sexes, 31·1 per cent. of the total 'other' population. Population of all religions—male children 17·4, and female children 14·6 per cent.; proportion of children of both sexes, 32·0 per cent. of the total District population. The small proportion of girls to boys among the Hindu and Muhammadan population, and the excessive proportion of females above twelve years of age to males of the same class, is probably due to the fact that girls are considered

to have attained womanhood at a much earlier age than boys reach manhood.

The number and proportion of insanes, and of persons affected with certain other infirmities in Dárjíling District is thus returned in the Census Report:—Insanes, males 14, and females 3; total, 17: deaf and dumb, males 13, and females 3; total, 16: blind, males 29, and females 15; total, 44: lepers, males 87, and females 8; total, 95. The total number of male infirms amounts to 143, or ·0269 per cent. of the male population; number of female infirms 29, or ·0069 per cent. of the female population. The total number of infirms of both sexes is 172, or ·0181 per cent. of the total District population.

I omit the details of the population according to occupation, as the figures returned in the Census do not stand the test of statistical criticism.

ETHNICAL DIVISION OF THE POPULATION.—The Census Report ethnically divides the population into the following seven classes:—Europeans and Americans, 420; Eurasians, 32; Asiatics other than natives of India and British Burmah, *i.e.* Nepálís, etc., 25,781; aboriginal tribes, 14,088; semi-Hinduized aborigines, 25,029; Hindu castes and people of Hindu origin, 23,114; Muhammadans, 6248.

I take the following details from Mr. C. F. Magrath's District Census Compilation. The list of Hindu castes will be reproduced on a subsequent page, but arranged in a different order from that given here, according to the rank which they hold in local public esteem:—

NAME OF NATIONALITY, TRIBE, OR CASTE.	Number.	NAME OF NATIONALITY, TRIBE, OR CASTE.	Number.
I.—NON-ASIATICS.		II.—MIXED RACES.	
European—			
English, . . .	207	Eurasian, . . .	32
Irish, . . .	97		
Scotch, . . .	42	III.—ASIATICS.	
French, . . .	19		
German, . . .	43	*A.—Other than Natives of India and British Burmah.*	
Italian, . . .	6		
Prussian, . . .	5	Nepálí, viz.—	
Total, .	419	Ále, ...	9
American, . . .	1	Basnet, . . .	2
		Chibing, . . .	15
TOTAL OF NON-ASIATICS.	420	Damái, ...	252
		Díwán, . . .	7

Name of Nationality, Tribe, or Caste.	Number.
A.—Other than Natives of India and British Burmah—continued.	
Dilpálí,	4
Durlámí,	26
Gáin,	28
Ghálíá,	537
Gharti,	1,419
Ghátwál,	47
Gurung,	3,150
Gurkhá,	51
Hátwálí,	7
Iyakhá,	235
Jamádár,	331
Jimí,	99
Jirel,	2
Kámí,	1,886
Khámbá,	3,913
Kháwá,	310
Limbu,	4,663
Mágár,	3,011
Mánjhí,	275
Moktán,	3
Newár,	1,087
Paháriyá,	92
Parbatiyá,	21
Párel,	3
Pradhán	30
Rái,	1,814
Risingiá,	6
Sengten,	3
Sárki,	328
Suchikár,	5
Sunáwar,	1,192
Tamang,	4
Thákur,	56
Thámí,	13
Thápá,	447
Unspecified,	398
Total,	25,781
B.—Natives of India and Burmah.	
1. *Aboriginal Tribes.*	
Aká,	165
Dhimál,	873
Lepchá,	3,952
Mech,	893
Murmí,	6,557
Uráon,	1,648
Total,	14,088

Name of Nationality, Tribe, or Caste.	Number.
2. *Semi-Hinduized Aborigines.*	
Barí,	14
Báurí,	100
Bhuiyá,	6
Chámár,	285
Chandál,	292
Dom,	88
Dosádh,	68
Hárí,	761
Kaorá,	1
Mal,	2
Mihtár,	226
Musáhar,	62
Rájbansí Koch,	23,124
Total,	25,029
3. *Hindus.*	
(i.) Superior Castes.	
Bráhman,	1,002
Rájput,	8,972
Total,	9,974
(ii.) Intermediate Castes.	
Bábhan,	6
Baidyá,	4
Káyasth,	44
Total,	54
(iii.) Trading Castes.	
Agarwálá,	18
Baniá,	230
Gandha-baniya,	17
Khatrí,	145
Márwárí,	10
Oswál,	34
Palíwál,	7
Robi,	7
Subarna-baniya,	49
Total,	517
(iv.) Pastoral Caste.	
Goálá,	420

Name of Nationality, Tribe, or Caste.	Number.
(v.) Castes engaged in preparing Cooked Food.	
Halwái,	90
Kándu,	90
Total,	180
(vi.) Agricultural Castes.	
Agurí,	15
Báruí,	342
Támbulí,	181
Kaibartta,	125
Koerí,	61
Kurmí,	260
Málí,	143
Ruilá,	17
Total,	1,144
(vii.) Castes engaged chiefly in Personal Service.	
Behárá,	26
Dhánuk,	19
Dhobí,	85
Hajjám or Nápit,	435
Káhár,	49
Total,	614
(viii.) Artisan Castes.	
Darzí (tailor),	541
Kámár (blacksmith),	456
Kumbhár (potter),	342
Sonár (goldsmith),	371
Sunrí (distiller),	486
Sutradhar (carpenter),	159
Telí (oilman),	412
Total,	2,767
(ix.) Weaver Castes.	
Chapwál,	61
Dhuniyá,	6
Ganesh,	890
Jugí,	100
Tántí,	644
Total,	1,701

Name of Nationality, Tribe, or Caste.	Number.
(x.) Labouring Castes.	
Chunárí,	53
Nuniyá,	33
Total,	86
(xi.) Castes occupied in Selling Fish and Vegetables.	*None.*
(xii.) Boating and Fishing Castes.	
Jaliyá,	44
Keut,	10
Málá,	26
Tior,	1
Total,	81
(xiii.) Dancer, Musician, Beggar, and Vagabond Castes.	
Báití,	14
(xiv.) Persons enumerated by Nationality only.	
Hindustání,	12
Madrásí,	12
Sharpa Bhutiá,	401
Telengá,	18
Total,	443
(xv.) Persons of Unknown or Unspecified Caste,	1,057
Grand Total of Hindus,	19,052
4. *Persons of Hindu origin not recognising Caste.*	
Vaishnav,	222
Buddhists,	3,433
Sanyásí,	303
Native Christians,	104
Total,	4,062

Name of Nationality, Tribe, or Caste	Number	Name of Nationality, Tribe, or Caste.	Number
5. *Muhammadans.*			
Mughul, . . .	82	Total of Natives of India, . . .	68,479
Pathán, ...	6		
Sayyid, ...	5		
Shaikh, ...	79	Total of Asiatics, .	94,260
Unspecified, . . .	6,076		
Total, .	6,248	Grand Total,	94,712

Tribes and Races.—The following is an account of the principal aboriginal and semi-aboriginal tribes and races met with in Dárjíling District.

The Lepchas are considered to be the aboriginal inhabitants of the hilly portion of the District. At all events they are the first known occupiers of this tract and of Independent Sikkim. They are a fine, frank race, naturally open hearted and free handed, fond of change, and given to an out-door life; but they do not seem to improve on being brought into contact with civilisation. The Deputy-Commissioner is of opinion that they are gradually being driven out of the District, owing, first, to the increase of regular cultivation, and secondly, to the conservation of the forests by the Forest Department. They have not a word for plough in their language, and follow the nomadic form of tillage known as *júm* cultivation. This consists in selecting a spot of virgin soil, clearing it of forest and jungle, and scraping up the surface with the rudest agricultural implements. The productive powers of the land become exhausted in a few years, when the clearing is abandoned and a new site chosen, where the same operations are carried on *de novo*. The Lepchás have no caste distinction, but they speak of themselves as belonging to one of the following nine septs or clans, namely—Barphung phucho, Adeng phucho, Thárjoph phucho, Singiáng, Singut, Tingel, Luksom, Tirem, and Sangmi. These all eat together and intermarry with each other.

Dr. Hooker, in his *Himálayan Journals* (vol. i. pp. 127-136), gives the following account of this people:—'The Lepchá is the aboriginal inhabitant of Sikkim, and the prominent character in Dárjíling, where he undertakes all sorts of out-door employment. The race to which he belongs is a very singular one, markedly

Mongolian in features, and a good deal too in habit, through imitation; still he differs from his Thibetán prototype, though not so decidedly as from the Nepálís and Bhutiás, between whom he is hemmed into a narrow tract of mountain country barely sixty miles in breadth. The Lepchás possess a tradition of the Flood, during which a couple escaped to the top of Tendang mountain near Dárjíling. The earliest traditions which they have of their history date no farther back than some three hundred years, when they describe themselves as having been long-haired, half-clad savages. At about that period they were visited by Thibetáns, who introduced Buddha worship, the plaiting of their hair into pigtails, and many other of their own customs. Their physiognomy, however, is so Thibetán in its character, that it cannot be supposed that this was their earliest intercourse with the transnivean races. Whether they may have wandered from beyond the snows before the spread of Buddhism and its civilisation, or whether they are a cross between the Tamulian of India and the Thibetán, has not been decided. Their language, though radically identical with Thibetán, differs from it in many important particulars.

'An attentive examination of the Lepchá in one respect entirely contradicts our preconceived notions of a mountaineer; he is timid, peaceful, and no brawler, qualities which are all the more remarkable from contrasting so strongly with those of his neighbours to east and west, of whom the Gurkhás are brave and warlike to a proverb, and the Bhutiás quarrelsome, cowardly, and cruel. A group of Lepchás is exceedingly picturesque. They are of short stature,—four feet eight inches to five feet,—rather broad in the chest, and with muscular arms, but small hands and slender wrists. The face is broad, flat, and of eminently Tartar character, flat nosed and oblique eyed, with no beard and little moustache; the complexion is sallow, or often a clear olive; the hair is collected into an immense tail, plaited flat or round. The lower limbs are powerfully developed, befitting genuine mountaineers; the feet are small. Though never really handsome, and very womanish in the cast of countenance, they have invariably a mild, frank, and even engaging expression, which I have in vain sought to analyze, and which is perhaps due more to the absence of anything unpleasing, than to the presence of direct grace or beauty. In like manner, the girls are often very engaging to look upon, though without one good feature—they are all smiles and good nature; and the children are frank, lively, laughing urchins. The old women are thorough hags.

Indolence, when left to themselves, is their besetting sin; they detest any fixed employment. Though fond of bathing when they come to a stream in hot weather, and expert, even admirable swimmers, these people never take to the water for the purpose of ablution. In disposition they are amiable and obliging, frank, humorous, and polite, without the servility of the Bengalí, and their address is free and unrestrained. Their intercourse with one another and with Europeans is scrupulously honest; a present is divided equally amongst many without a syllable of discontent or a grudging look or word. Intercourse with the people of the plains has taught them, however, to overcharge and to use extortion in dealing. They are constantly armed with a long, heavy, straight knife called *ban*, but never draw it on one another; family and political feuds are alike unheard of amongst them.

'The Lepchá is superior in morals to his Thibetán and Bhutiá neighbours, polyandry being unknown, and polygamy rare. Like the natives of other climates which, though cold, are moist and equable, the Lepchá's dress is very scanty; and while Englishmen at Dárjíling are wearing woollen under-garments and hose, he is content with one cotton vesture, which is loosely thrown round the body, leaving one or both arms free; it reaches to the knee and is gathered round the waist. Its fabric is close; the ground colour white, ornamented with longitudinal blue stripes prettily worked with red and white. When new and clean, this garb is remarkably handsome and gay, but not showy. In cold weather an upper garment with loose sleeves is added. A long knife with a common wooden handle hangs by his side, stuck in a sheath; he has often also a quiver of poisoned arrows and a bamboo bow across his back. On his right wrist is a curious wooden guard for the bowstring; and a little pouch containing aconite poison and a few common implements is suspended from his girdle. He seldom wears a hat, and when he does, it is often extravagantly broad and flat brimmed, with a small hemispherical crown. It is made of leaves of *Scitamineæ*, between two thin plates of bamboo-work, clumsy and heavy. This is generally used in the rainy weather; while in the dry season a conical hat is worn, also of plaited slips of bamboo, with broad flakes of talc between the layers, and a peacock's feather at the side. His umbrella consists of a large hood, much like the ancient boat called a coracle, which being placed over the head reaches to the thighs behind. It is also made of plaited bamboo. A group of Lepchás wearing these

hats, running along in the pelting rain, are very droll figures; they look like snails with their shells on their backs. All the Lepchás are fond of ornaments, wearing silver hoops in their ears, necklaces made from cornelian, amber, and turquoise brought from Thibet, and pearls and corals from the south, with curious silver and golden charm-boxes or amulets attached to their necks or arms. These last are of Thibetán workmanship, and are often of great value. They contain little idols, charms, and written prayers, or the bones, hair, or nail parings of a Lámá or Buddhist priest; some are of great beauty, and highly ornamented. In these decorations and in their hair they take some pride. The women always wear two braided pigtails, and it is by this they are most readily distinguished from their effeminate-looking partners, who wear only one. When in full dress, the women's costume is extremely ornamental and picturesque; besides the shirt and petticoat, she wears a small, sleeveless, woollen cloak of gay pattern, usually covered with crosses, and fastened in front by a girdle of silver chains. Her neck is loaded with silver chains, amber necklaces, etc.; and her head adorned with a coronet of scarlet cloth, studded with seed pearls, jewels, glass beads, etc. The common dress is a long robe of *endi*, a cloth of coarse silk spun from the cocoon of a large caterpillar.

'In diet, the Lepchás are gross feeders. Rice, however, forms their chief sustenance. It is grown without irrigation, and produces a large, flat, coarse grain, which becomes gelatinous and often pink when cooked. Pork is a staple dish, and they also eat elephant and all kinds of animal food. When travelling, they live on whatever they can find, whether animal or vegetable. Fern tops, roots of *Scitamineæ* and their flower buds, various leaves and fungi, are chopped up, fried with a little oil, and eaten. Their cooking is coarse and dirty. Salt is costly, and prized; *pán* is never eaten. They are too poor to buy tobacco, and too indolent to grow and cure it. Spices, oil, etc. are relished.

'They drink out of little wooden cups, turned from knots of maple or other woods, which are very pretty, and often polished and mounted with silver. Some are supposed to be antidotes against poison, and hence fetch an enormous price. These latter are of a peculiar wood, rarer and paler coloured than the others. The knots from which the cups are formed are produced on the roots of oaks, maples, and other mountain forest trees by a parasitical plant known to botanists as *Balanophora*. Their intoxicating drink, which seems

more to excite than to debauch the mind, is an imperfectly fermented beer. Spirits are rather too strong to be relished raw, and when a glass of wine is given to one of a party, he sips it and hands it round to all the rest. A long bamboo flute, with four or six burnt holes far below the mouth-hole, is the only musical instrument I have seen in use among them. When travelling, after the fatigues of the day are over, the Lepchás will sit for hours chatting, telling stories, singing in a monotonous tone, or blowing this flute.

'Marriages among the Lepchás are contracted in childhood, and the wife is purchased by money or by service rendered to the future father-in-law. The parties are often united before the woman leaves her parents' roof, in cases where the payment is not forthcoming, and where the bridegroom prefers giving his and his wife's labour for a stated time in lieu thereof. On the expiration of the term of service, or on the payment of the stipulated sum of money, the marriage is publicly celebrated with much feasting. The females are generally chaste, and the marriage tie is strictly kept. Its violation is heavily punished by divorce, beating, slavery, etc. In cases of intermarriage with foreigners, the children belong to the father's country. All the labours of the house, the field, and the march devolve on the women and children.

'Small-pox is much dreaded, and infected persons carefully shunned; a suspicion of this or of cholera frequently emptying a town or village in a night. Disease is very rare among the Lepchás; ophthalmia, elephantiasis, and leprosy, the scourge of hot climates, are rarely known. Goitre is prevalent, although not so conspicuously as among the Bhutiás and others. Rheumatism is frequent, as are intermittent fevers and ague; also violent and often fatal remittent fevers, especially at the beginning and end of the rains. The European complaints of liver and bowel disease are all but unknown. Death is regarded with horror. The dead are burned or buried, and sometimes both. Omens are sought in the entrails of fowls, etc.; and other vestiges of their savage origin are still preserved, though now gradually disappearing.

'The Lepchás profess no religion, though acknowledging the existence of good and bad spirits. To the good spirits they pay no heed. "Why should we?" they say. "The good spirits do us no harm; the evil spirits who dwell in every rock, grove, and mountain are constantly at mischief, and to them we must pray, for they hurt us." Every tribe has a priest-doctor, who neither knows nor

attempts to practise the healing art, but is a pure exorcist, all bodily ailments being deemed the handiwork of devils, who are to be cast out by prayers and invocations. Still they acknowledge the Lámás to be very holy men, and were the latter only moderately active, they would soon convert all the Lepchás. Their priests are called Bijuás; they profess mendicancy, and seem intermediate between the begging friars of Thibet, whose dress and attributes they assume, and the exorcists of the aboriginal Lepchás. They sing, dance, beg, bless, curse, and are merry mountebanks; those that affect more of the Buddhist Lámá carry the *mani* or revolving praying machine, and wear rosaries and amulets; others, again, are all tatters and rags. They are often employed to carry messages, and to transact little knaveries. The natives stand in some awe of them, and being of a generous disposition, keep the wallet of the Bijuá always full.

'Such are some of the prominent features of this people, who inhabit the sub-Himálayas between the Nepál and Bhutiá frontiers, at elevations of from three thousand to six thousand feet. In their relations with us, they are conspicuous for their honesty, their power as carriers and mountaineers, and their skill as woodsmen; they can build a waterproof house with a thatch of banana leaves in the lower region, or of bamboo in the more elevated tracts, and equip it with a table and bedsteads for three persons, in an hour, using no implement but their heavy knife. Kindness and good humour soon attach them to your person and service. A gloomy-tempered or a morose master they avoid, from an unkind one they flee. If they serve a good hill-man like themselves, they will follow him with alacrity, sleep on the cold bleak mountain, exposed to the pitiless rain, without a murmur, lay down a heavy burden to carry their master over a stream, or give him a helping hand up a rock or precipice—do anything, in short, but encounter a foe, for I believe the Lepchá to be a veritable coward. It is well, perhaps, he is so; for if a race numerically so weak were to embroil itself by resenting the injuries of the warlike Gurkhás or dark Bhutiás, the folly would soon lead to destruction.'

The Deputy-Commissioner in his report to me mentions that Colonel Mainwaring, who was at Dárjíling in 1869, and who is an excellent Lepchá scholar, states that he has heard of a race known as Láp-chás, north of Spití, probably identical with the Lepchás of Sikkim and Dárjíling. This statement is borne out by Captain J. D. Herbert, late Deputy Surveyor-General of India, in a paper

in the Indian *Gleanings in Science* (p. 939):—'This was my first interview with the Lepchás, and I saw immediately that they were the same people whom I had met with at Niálang, Jahnabbi, at Shipchi, on the Satlaj at Hangarang, and at Lárí in Ladákh. They are in fact the people who have been erroneously called Chinese Tartars, and are in reality of the same race as the Thibetáns, being a family of the great division of Eleuth Tartars. Yet the Lepchás distinguish between themselves and the Bhutiás and the Thibetáns, and the languages, although resembling each other sufficiently, have yet a difference.'

THE NEPALIS, who form 34 per cent. of the population of the District, are all immigrants from the State of Nepál to the westward. They are a pushing, thriving race, and the Deputy-Commissioner is of opinion that they will in time occupy the whole District. They make capital agriculturists, and are preferred as labourers by the managers of the tea gardens. The Nepálís are divided into many classes or septs, of which the most numerous are the twelve following:—(1) The Gurungs, who principally rear sheep; (2) the Ghaliás, who rear buffaloes; (3) the Newárs, who are cultivators and shopkeepers; (4) Sárkís or tanners; (5) Kámís or blacksmiths; (6) Dámáis or tailors; and (7) the Murmís; (8) Bráhmans; (9) Khámbas; (10) Limbus; (11) Tákkas; and (12) Mangárs; these last six are principally agriculturists. There are also several other denominations; Mr. Magrath's District Census Compilation classifies the Nepálí population of Dárjíling under forty-one heads, which have been already given (pp. 44, 45); their total number is 25,781. Including the Murmís, who in the District Census Compilation are placed among the aboriginal tribes, the number of the Nepálís in Dárjíling would be raised to 32,338. First in rank among the Nepálís of Dárjíling are the Newárs, or traders, and the Murmís, or the chief of the agricultu classes; these are the most numerous of the Nepálí tribes in the District. The lowest caste is the Dámáis or tailors; next to them come the Kámís or blacksmiths, and the Sárkís or tanners. The Gurungs or shepherds principally frequent the heights. The Nepálís who immigrate to Dárjíling from their native country mostly settle down permanently in the District. They will live in the same village as the Lepchás, but in a separate quarter of it by themselves. The following account of the principal Nepálí races or tribes, and of their peculiar habits, is quoted from Dr. Latham's *Ethnology of India* (London 1859).

(1) THE SUNAWARS. — Dr. Latham states: 'Of these, I only know that they lie in the north-west of Nepál, conterminous (I believe) with the true Bhot' [or Thibetáns].

(2) THE MAGARS. — Concerning this people, Dr. Latham gives the following account:—'It is the lower levels of Nepál, chiefly to the east of the Kálí, which are occupied by the Mágárs. This is a point worth noticing, because on approaching the mountain tops the population changes. The forces which have changed the character of the aborigines of Western Nepál, Garhwál, and Kumáon are in continuance, directing themselves eastwards. Hence the Mágárs may, at some future time, be what their neighbours to the westward are at present, thoroughly Indianized. Their present condition is, more or less, transitional. Their physical conformation is their own, being that of the Bhot in general. At the same time there has been much intermarriage, and amongst the Hindus we may find the flat faces of the aborigines; amongst the aborigines, the oval outlines, and prominent, regular, or delicate features of their conquerors. The language of the Mágárs is their own; essentially what is called monosyllabic; essentially in the same great class with the Thibetán, Chinese, Burmese, and Siamese. There are elements, however, which betoken transition, inasmuch as numerous words of Hindu origin have become incorporated. Besides this, many of the Hindu population of Nepál speak Mágár; whilst many Mágárs have either unlearnt their own tongue, or use the Hindu in preference. This is more especially the case with the soldiers, many of whom are separated for long periods of time from their fellow-countrymen at home, doing service in garrisons in different parts of the kingdom. The Mágár alphabet is of Indian origin. . . . The religion is hybrid. Without being scrupulous in other meats, the Mágár abstains from beef. Utterly unscrupulous in the way of drinks, he indulges freely in the use of fermented liquors, and makes anything in the shape of a feast or festival an occasion and an excuse for intoxication. His excess in this matter is notable. Then he has his own priesthood, or, at any rate, an Indian priesthood with a Mágár nomenclature. His Bráhmans are all Achárs. In the pagan times, a priest was called a Dámí; Dámí being the name for priest in more than one of the tribes akin to the Mágár at the present moment. . . . Imperfect as is the information regarding the early history and social constitution of the Mágárs, we know that a trace of a tribal division is to be found. There are

twelve *thums*. All individuals belonging to the same *thum* are supposed to be descended from the same male ancestor, descent from the same mother being by no means necessary. So husband and wife must belong to different *thums*. Within one and the same *thum* there is no marriage.'

(3) THE GURUNGS.—Dr. Latham gives the following account of this people:—'The tribes that lie equally westward with the Mágárs, but who differ from them in occupying a higher place on the mountain-side, are the Gurungs. These are decidedly and eminently pastoral, being breeders of sheep. They use, too, the sheep as a beast of burden, and lay upon its back such light loads as their chapmanship requires them to move about with. The heat of the plains is better borne by the Mágárs than by the Gurungs. Their language is their own—different from that of the Hindu population; different from that of the Mágárs; not very well known even to professed philologues; but known from a sufficiency of samples to enable us to place—or rather to isolate—it. It is the medium by which the Gurung priests propagate a Buddhist creed; for the Hindu religion, though not unknown to some of the Gurungs, has yet to make its way to any notable extent. That it will encroach on the earlier creed is likely. On the other hand, it is not certain that even Buddhism has wholly replaced the original paganism. A tribe or collection of tribes, called Bujal Ghartí, is accused of numerous impurities in the way of food, for they eat everything, except, perhaps, milk. At any rate they eat beef. When the details of the Bujal superstitions are known, they will probably turn out to be those of the Bodos and Dhimáls; neither Buddhist nor Bráhmanic, but yet tinctured with an early Bráhmanism, which in its present state is either a rudiment of something that has to be developed, or a fragment of something that has fallen into decay. Like the Mágárs, the Gurungs fall into tribes. The principal of these are the Nísís, Ghális, and Thagsís; the latter being the occupants of the highest altitudes, and constituting the truly Alpine division of the family.'

(4) THE JAREYAS.—Regarding this people, Dr. Latham states: 'Of the Jareyás I can give but an indifferent account. They lie to the south of the Gurungs, with whom they are intermixed, and with whom they intermarry. They are eminently Hindu both in creed and manners, notwithstanding which, they may easily be as separate from both Gurungs and Mágárs, as those two families are from one

another. But they may also be either Gurungs, or Mágars, or Newárs.'

(5) NEWARS.—'The main portion of the central valley of Nepál proper was originally Newár, and Newár it is now, save and except the Hindu populations of the conquest. Favoured in respect of both soil and climate, at a lower level than that occupied by the sheep-feeding Gurungs, the Newárs occupy a strong clay soil, fitted for brick-making, tile-making, and tillage. And this determines their industry and their architecture. The Newárs are agriculturists and masons. No better cultivation, no better domestic architecture, is to be found than that of the Newárs. The houses, as a general rule, are well built and three stories high. They form large villages or small towns. The morality exhibited by their occupants in sexual relations is by no means exemplary; indeed, the freedom (to use no stronger term) of the women is notorious. Of their primitive paganism, no traces have been noticed; perhaps it never had any definite existence. Analogues to the Bujal Gharti amongst the Gurungs (described above, p. 55) there are none, so far as evidence goes. On the other hand, there is no small portion of Hinduism engrafted upon the original Buddhism. There is also a great deal of true, or slightly modified Bráhmanism. Still it is Bráhmanism with a difference. A Newár priest is not a Hindu Bráhman, but a native Achár. Then there is the class of surgeons and physicians called Jausi, who are the sons of Bráhman fathers and Newár mothers. A little before the Gurkhá conquest, Hinduism took root in the Newár country, when some influential proselytes to the worship of Siva were made. These have developed themselves and their successors into a definite division of the population. Nowhere, however, is there absolute purity. Like the Mágárs, the Newárs eat beef, and drink alcoholic liquors. They have a priesthood like the Mágárs, Bráhmanic in many respects, but not Bráhmanic in name and origin. A worshipper of Siva will both kill and eat his beef; one of Buddha will eat but not kill it. They burn their dead.'

(6) THE MURMIS AND KIRATAS OR KICHAKS.—'These inhabit the country near the Sikkim frontier, and in all probability belong to both kingdoms' [of Nepál and Sikkim]. 'Of the Murmís, I only know that they are Buddhists, with a less amount of Hinduism amongst them than any of the tribes belonging to the western parts of Nepál. Of the Kirátás or Kichaks' [not returned in the Census

Report as being found in Dárjíling], 'half may be Buddhist, half Bráhmanic. Bráhmanic, however, as that half is, it either eats beef or unwillingly abstains from it.' Dr. Hooker, in his *Himálayan Journals*, states that 'the Murmís are of Thibetán origin, and are called *nishang* from being composed of two branches, from the districts of Nimo and Shang, both on the road between Sikkim and Lhássá. They now principally inhabit central and eastern Nepál, and are a pastoral and agricultural people, inhabiting elevations of from four thousand to six thousand feet, and living in stone houses thatched with grass. They are a large, powerful, and active race, grave, very plain in features, with little hair on the face.'

(7) THE LIMBUS also inhabit Eastern Nepál and Sikkim indifferently. Dr. Latham states:—'The Limbus intermarry with the Kirátás, and are somewhat less Buddhist and more Bráhmanic than their situation leads us to expect. It has been the policy of the Nepál rulers to conciliate them. The few known notices concerning the Limbus return them as hardy and industrious. They cultivate grain, and feed cows, pigs, and poultry. Their huts are neat and well made, the walls being of split bamboo, and the roofs of the leaves of the wild ginger and cardamom. They are guyed down to the ground by long rattans, to steady them against the wind.' Dr. Hooker makes the following mention of this people:—'Next to the Lepchás, the most numerous tribe in Sikkim are the Limbus (called Chang by the Lepchás); they abound also in East Nepál, where they once ruled, inhabiting elevations of from two thousand to five thousand feet. Although not divided into castes, they belong to several tribes. All consider themselves as the earliest inhabitants of the Támbar valley, though they have a tradition of having originally emigrated from Thibet, which their Tartar countenance confirms. They are more slender and sinewy than the Lepchás, and neither plait their hair nor wear ornaments. Instead of the *ban* they use the Nepál *kukri*, a curved knife or bill-hook; while for the striped kirtle of the Lepchá are substituted loose cotton trousers and a tight jacket; a sash is worn round the middle, and on the head a small cotton cap. When they ruled over East Nepál, their system was feudal, and in their struggles against the Nepálís they were with difficulty dislodged from their strongholds. They are said to be equally brave and cruel in battle, putting the old and weak to the sword, carrying the younger prisoners into slavery, and killing on the march such captives as are unable to proceed. Many

enlist at Dárjíling, which the Lepchás never do; and the Rájá of Nepál employs them in his army, where, however, they seldom obtain promotion, this being reserved for soldiers of Hindu tribes. Their habits are so similar to those of the Lepchás, that they constantly intermarry. They mourn for, burn, and also bury their dead, raising a mound over the corpse, erecting a headstone, and surrounding the grave with a little paling of sticks; they then scatter eggs and pebbles over the ground. In these offices, the Bíjuás of the Lepchás are employed; but the Limbus have also priests of their own, called Phedangbus, who belong to a higher order than the Bijuás. The Phedangbus officiate at marriages, when a cock is put into the bridegroom's hands and a hen into those of the bride; the Phedangbu then cuts off the birds' heads, when the blood is caught on a plantain leaf and runs into pools, from which omens are drawn. At death, guns are fired to announce to the gods the departure of the spirit. There are many gods, with one supreme head, to whom offerings and sacrifices are made. They do not believe in metempsychosis. The Limbu language is totally different from the Lepchá, with less of the "z" in it, and more labials and palatals, hence more pleasing. Its affinities I [Dr. Hooker] do not know, the Lépchá or Nágrí written character being used indifferently. Dr. Campbell, from whom I derived most of my information respecting the people, was informed on good authority that they had once a written language, now lost, and that it was compounded from many others by a sage of antiquity. The same authority stated that their Lepchá name of Chang is a corruption of that of their original place of residence,—possibly the Tsang province of Thibet.'

(8) THE CHEPANGS, HAIYUS, AND KASANDAS are three rude tribes inhabiting the jungles of Central Nepál, of which the first named are probably identical with the Chibings, returned in the Census Report. The following account of these peoples is from a paper by Mr. B. H. Hodgson, of the Bengal Civil Service, formerly British Resident at the Court of Nepál:—'Amid the dense forests of the central region of Nepál, to the westward of the great valley, dwell, in scanty numbers, and nearly in a state of nature, two broken tribes having no apparent affinity with the civilised races of that country, and seeming like the fragments of an earlier population. They toil not, neither do they spin, they pay no taxes, acknowledge no allegiance, but, living entirely upon wild fruits and the produce of the chase, are wont to say that the Rájá is lord of

the cultivated country, as they are of the unredeemed waste. They have bows and arrows, the iron arrow-heads being procured from their neighbours; but they possess almost no other implement of civilisation, and it is in the very skilful snaring of the beasts of the field and the fowls of the air that all their little intelligence is manifested. Boughs torn from trees and laid dexterously together constitute their only houses, the sites of which they are perpetually shifting, according to the exigences or fancies of the hour. In short, they are altogether as near to what is usually called the state of nature as anything in human shape can well be, especially the Kasandás; for the Chepángs are a few degrees above their *confrères*, and are beginning to hold some slight intercourse with civilised beings, and to adopt the most simple of their arts and habits. It is due, however, to these rude foresters to say that, though they stand wholly aloof from society, they are not actively offensive against it; and that neither the Government nor individuals charge them with any aggressions against the wealth they despise, or the comforts and conveniences of whose value they have no conception. They are, in fact, not noxious, but helpless; not vicious, but aimless, both morally and intellectually, so that no one could behold without distress their careless, unconscious inaptitude.

'During a long residence in Nepál, I could never gain the least access to the Kasandás, though aided by all the authority of the Darbár (native Court); but, so aided, I once in the course of an ostensible shooting excursion, persuaded some Chepángs to let me see and converse with them for three or four days, through the medium of some Gurungs of their acquaintance. On that occasion I obtained a specimen of their language, and whilst they were doling forth the words to my interpreter, I was enabled to study and to sketch the characteristic traits of their forms and faces. Compared with the mountaineers among whom they are found, the Chepángs are a slight but not actually deformed race, though their large bellies and thin legs indicate strongly the precarious amount and innutritious quality of their food. In height they are scarcely below the standard of the tribes around them,—who, however, are notoriously short of stature,—but in colour they are very decidedly darker, or of a nigrescent brown. They have elongated (fore and aft) heads, protuberant, large mouths, low, narrow foreheads, large cheek-bones, flat faces, and small eyes. But the protuberance of the mouth does not amount to prognathous deformity, nor has the small, suspicious

eye much, if anything, of the Mongolian obliqueness of direction or set in the head. Having frequently questioned the Darbár, whilst Resident at Káthmándu, as to the relations and origin of the Chepángs and Kasandás, I was invariably answered that no one could give the least account of them, but that they were generally supposed to be autochthones, or primitive inhabitants of the country. For a long time such also was my own opinion, based chiefly upon their physical characteristics as above noted, and upon the absence of all traceable lingual or other affinity with the tribes around them. I took them to be fragments of an original hill population prior to the present Thibetán inhabitants of these mountains, and to be of Tamulian extraction, from their great resemblance in form and colour to the aborigines of the plains, particularly the Kols. It did not for several years occur to me to look for lingual affinities beyond the proximate tribes; nor was I, save by dint of observation, made fully aware that the Mongolian type of mankind belongs not only to the races of known northern pedigree, such as the mass of the sub-Himálayan population, but equally so to all the aborigines of the plains, at least to all those of Central India. Having of late, however, become domiciled much to the eastward of Káthmándu, and having had more leisure for systematic and extended researches, those attributes of the general subject which had previously perplexed me were no longer hindrances to me in the investigation of any particular race or people. I now saw in the Mongolian features of the Chepángs a mark equally reconcilable with Tamulian *or* Thibetán affinities; in their dark colour and slender frame, characteristics at first sight indeed rather Tamulian than Thibetán, but such as might, even in a Thibetán race, be accounted for by the extreme privations to which the Chepángs had for ages been subject; and in their physical attributes taken altogether, I perceived that I had to deal with a test of affinity too nice and dubious to afford a solution of the question of origin. I therefore turned to the other or lingual test, and pursuing this branch of the inquiry, I found that with the southern aborigines there was not a vestige of connection, whilst, to my surprise, I discovered in the lusty Lhopás of Bhután the unquestionable origin and stock of the far removed, and physically very differently characterized, Chepángs.'

With regard to the more general characteristics of the Nepál tribes, Mr. B. H. Hodgson, in a paper published in the *Journal of the Asiatic Society of Bengal* for 1848, Part II. p. 638, makes the

following remarks:—'The Newárs and Murmís are the chief races. Of all the tribes, the Newárs are by far the most advanced in civilisation. They have letters and literature, and are well skilled in the useful and fine arts. Their agriculture is unrivalled; their towns, temples, and images of the gods are beautiful for materials and workmanship; and they are a steady, industrious people, equally skilled in handicrafts, commerce, and the tillage of the soil. The rest of the highland tribes or peoples are fickle, lazy races, who have no letters, no literature, no towns, no temples nor images of the gods, no commerce, no handicrafts. They dwell in small, rude villages or hamlets. Some are fixed cultivators, some migratory, perpetually changing their abode as soon as they have raised a crop or two amid the ashes of the burnt forest. And some, again, prefer the rearing of sheep to agriculture, with which latter they seldom meddle. Such are the Gurungs, whose vast flocks of sheep constitute all their wealth. The Murmís and Mágárs are fixed cultivators; the Kiránțís and Limbus, for the most part, migratory ones; and the Lepchás of Sikkim still more completely so. The more you go eastward, the more the several tribes resemble the Bhutiás of Thibet, whose religion and manners prevail greatly among all the tribes east of the valley of Nepál, though most of them have a rude priesthood and religion of their own, independent of the Lámás.'

THE BHUTIAS inhabiting Dárjíling District are principally found in the newly acquired tract east of the Tístá, which was added to British territory on the close of the Bhután war in 1864. Three classes of Bhutiás are found in Dárjíling District, namely, the Bhutiás proper, belonging to Thibet; Bhutiás from Bhután; and Sikkim Bhutiás. The catalogue of nationalities already given (p. 45), returns the number of Sharpa Bhutiás at 401. This figure only represents the number of Bhutiás from Bhután proper. In the same catalogue the number of Buddhists is given at 3433. It is probable that all of these are Bhutiás; and the total number of persons belonging to this race in Dárjíling would thus be raised to 3834. The Sharpa Bhutiás are a cross between the Thibetán Bhutiá and the Lepchá. Dr. Hooker, in a footnote to page 136, vol. i. of his *Himálayan Journals*, states:—'Bhot is the general name for Thibet, not for Bhután. The Bhutiás, who are natives of Bhután or of the Dharma country, are called Dharma people, in allusion to their spiritual chief, the Dharma Rájá. They are a darker and more

powerful race than the Thibetán Bhutiás, rude, turbulent, and Thibetán in language and religion, with the worst features of those people exaggerated. The Dharma people are numerous in Dárjíling; they are often runaways from their own country. In the Himálayas, the name Bhután is unknown amongst the Thibetáns; it signifies literally (according to Mr. Hodgson) the end of Bhot or Thibet, being the extreme eastern end of that country. The Lepchás designate Bhután as Aieu, as do often the Bhutiás themselves.' The Bhutiás are more industrious than the Lepchás, and make better husbandmen; besides having superior crops of all ordinary grains, they raise cotton, hemp, and flax. The cotton is cleaned here, as elsewhere, by means of a simple gin. The Thibetán Bhutiás, or cis-nivean Thibetáns, as Dr. Hooker calls them, have all the virtues with but few of the vices of the Bhutiás proper, and are more accessible and less sulky. Dr. Hooker thus describes the Thibetán Bhutiás, whom he met with while travelling in East Nepál (*Himálayan Journals*, vol. i. pp. 202–204) :—'We daily passed parties of ten or a dozen Thibetáns on their way to Mywa Guola, laden with salt; several families of these wild, black, uncouth-looking people generally travel together. The men are middle-sized, often tall, very square built and muscular; they have no beard, moustache, or whiskers, the few hairs on their faces being carefully removed with tweezers. They are dressed in loose blanket robes girt about the waist with a leather belt, in which they place their iron or brass pipes, and from which they suspend their long knives, chop-sticks, tobacco-pouch, tweezers, tinder-box, etc. The robe, boots, and cap are grey, or striped with bright colours; they wear skull-caps, and the hair plaited into a pig-tail. The women are dressed in long flannel petticoats and spencers, over which is thrown a short, sleeveless, striped cloak, drawn round the waist by a girdle of broad brass or silver links, to which hang their knives, scissors, needle-cases, etc., and with which they often strap their children to their backs; the hair is plaited in two tails, and the neck loaded with strings of coral and glass beads, and great lumps of amber, glass, and agate. Both sexes wear silver rings and earrings set with turquoises, and square amulets upon their necks and arms; these last are boxes of gold or silver, containing small idols, or the nail-parings, teeth, or relics of some sainted Lámá, accompanied with musk, written prayers, and charms. All are good-humoured and amiable-looking people, very square and Mongolian in counte-

nance, with broad mouths, high cheek-bones, narrow, upturned eyes, broad, flat noses, and low foreheads. White is their natural colour, and rosy cheeks are common among the younger women and children; but all are begrimed with filth and smoke, added to which, they become so weather-worn from exposure to the most rigorous climate in the world, that their natural hues are rarely to be recognised. Their customary mode of saluting one another is to hold out their tongue, grin, nod, and scratch their ear; but this method entails so much ridicule in the low countries that they do not practise it to Nepálís or strangers. Most of them when meeting me, on the contrary, raised their hands to their eyes, threw themselves on the ground, and kotowed most decorously, bumping their foreheads three times on the ground. Even the women did this on several occasions. On rising they begged for *bakhshish*, which I gave in tobacco or snuff, of which they are immoderately fond. Both men and women constantly spin wool as they travel.

'These motley groups of Thibetáns are singularly picturesque, from the variety in their parti-coloured dresses and their odd appearance. First comes a middle-aged man or woman, driving a little silky black *yák* (Himálayan ox), grunting under his load of salt, besides pots, pans, kettles, stools, churns, and bamboo vessels, all keeping up a constant rattle; and, perhaps, buried amongst all, a rosy-cheeked and rosy-lipped baby, sucking a lump of cheese curd. The main body follow in due order, and you are soon entangled amidst sheep and goats, each laden with its two little bags of salt. Beside these stalks a huge, grave, bull-headed mastiff, loaded like the rest, his bushy tail thrown over his back in a majestic sweep, and a thick collar of scarlet wool round his neck and shoulders, setting off his long, silky coat to the best advantage. He is decidedly the noblest looking of the party, especially if a fine and pure black specimen. He seems rather out of place, neither guarding nor keeping the party together; but he knows that neither *yáks*, sheep, nor goats require his attention; all are perfectly tame, so he takes his share of work as salt-carrier by day, and watches by night as well. The children bring up the rear, laughing and chatting together: they too have their loads, even to the youngest that can walk alone.'

Regarding the Bhután Bhutiás, I take the following extracts from Colonel Dalton's *Descriptive Ethnology of Bengal* (Calcutta 1872), pp. 96, 99:—'Physically the Bhutiás are a very fine people; there are some really tall men amongst them. But though very robust as com-

pared with the people of the plains, they are not nearly such a stalwart race as the Sikkimís and Thibetáns, which is possibly to be atributable to their immorality and drunken habits. Their dress is a loose woollen coat reaching to the knees, bound round the waist by a thick fold of cotton cloth. The full front of the coat is used as a pocket, and into this opossum-like pouch, food, cooked and uncooked, is often thrust, including putrid fish and meat. The pouch always contains a store of betel-nut and prepared lime, to be eaten with *pán* leaves, which they are continually chewing The women's dress is a long cloak with loose sleeves. They have all broad, flat faces of the true Mongolian type, small oblique eyes, large mouths, noses short and low; not, on the whole, the most attractive combination of features, but many of the young women have fine, plump, rosy cheeks, healthy and pleasant to look upon. They appear rather careless about their personal appearance. Their tresses are generally allowed to float as nature pleases, though some of the more tidy and respectable bind theirs with a handsome bandeau of flat silver chains, having a large jewelled ornament in front. Many women appear with shorn heads; these are the nuns, who are said to have taken vows of celibacy. As a rule, all are dirty in their persons, wearing their clothes till they rot off, and seldom indulge in ablutions.

'The Lámás or priests form a large proportion of the population. Entrance into the priesthood is obtained by the permission of the Deb or secular Rájá, on payment of a fee. In addition to their religious duties, the Lámás are charged with the medical care of the people; but as exorcism is the only system of treatment attempted, assurance on the part of the practitioner, and faith or that of the patient, are all that is needed. The number of Bhután Lámás has been estimated at from 1500 to 2000; they live in monasteries, the chief of which is at the headquarters of the Governnent. The village Lámás, and the people generally, confine their religious exercises to telling their beads, with the constant, dreary repetition of the sentence, "Om-Mani-Padmi-Om." Their preparation for a future state seems to consist in the personal or vicarious performance of this rite; hence the praying machines, by which countless repetitions of the sentence are produced. The priests all wear dresses of a garnet colour, and a woollen garment thrown over the left shoulder, leaving the right arm bare. These priests will all tell you that the soul of religion is mental abstraction and the withdrawal of the

mind from all mundane considerations, in order that the thoughts may be absolutely concentrated on the attributes and perfection of Buddha; but the most devout of them may be seen listening to and smiling at the conversation of others, whilst they pass the beads through their hand and mutter the everlasting "Om-Mani-Padmi-Om." The conversion of the Bhutiás to Buddhism has not altogether eradicated their paganism. The common people believe in an innumerable host of spirits, and make offerings to them of flowers and bits of rag.

'It is very singular that, of the many observers who have visited Bhután and written on that country, not one has been able to tell us that they have such an institution as a marriage ceremony. It is known that the tie of connubial union is a very loose one, and that chastity is not a virtue either practised or appreciated. From my own observation, I believe the Bhutiás to be singularly indifferent on the subject of the honour of their women, and the women themselves to have little delicacy and modesty. They cover themselves carefully, but it is to keep out the cold; of covering from feelings of modesty they have no notion. Polyandry is a recognised institution amongst the Bhutiás; but it prevails far more extensively in the northern and central portions of Bhután than in the southern. . . .

'In the construction of their houses, the Bhutiás are in advance of their neighbours of the plains. The buildings may be compared to small farmhouses in England, or Swiss cottages, being built of rubble, stone and clay, of two, three, and sometimes four stories; all the floors are neatly boarded with deal, and on two sides are well constructed verandahs, ornamented with carved and painted woodwork. One of these is sometimes enclosed for the women, the front opening by sliding panels when they wish to peep. The workmanship displays considerable skill in joinery, the panelling being very good of its kind. The interiors are preserved in a better state of cleanliness than, from the general habits of the Bhutiás, we should have been led to expect. The roofs are made of shingles of pine, five or six feet in length, laid over a framework of wood, and kept in their places with stone. Immediately under the roof is a store-room for dried turnips, grain, etc.; and the floor of this apartment, which is made of concrete clay, forms a second roof to the remainder of the house. The great desideratum is a chimney; the smoke has to find its way out as it can, and the consequence is that the inmates, emerging in the winter, look as if they had come out of

a coal mine. It is not in houses alone that the Bhutiás display their architectural and constructive skill. Their river embankments are represented as creditable works. Some of the stone embankments of the river at Páro, especially the revetments of the bridge, are admirably executed. . . .

'It is only the coarser description of cloths worn by the Bhutiás that are woven in the country; their silken dresses and finer woollen fabrics are obtained from Thibet and China. The women weave seated on the ground. The web passes round three rollers of wood forming a triangle; one of these is attached by a leather belt to the woman, another supported on the posts in front of her, and the third pinned to the ground farther off. The woman, by her position, keeps the web stretched to the necessary tightness. The shuttle is a small hollow bamboo containing a roller for the thread; this she passes through the inclined web before her, working upwards and passing the woven part round below, until the completion of the piece brings the whole round again. When done, she shuts up her work and the loom disappears. The Thibetán women, on their journeys to the plains, all carry looms of this kind, and shortly after their arrival at an encamping ground they may be seen at work. Another art which the Bhutiás have acquired is paper-making, from the bark of a tree called *diah* or *deh*. In addition to the fermented liquor which, like all the hill tribes, they make from wheat, rice, and millet, they also possess a knowledge of distillation, and indulge very freely in alcoholic drinks. . . . In the disposal of the dead, the Bhutiás follow the practice of the Hindus. They burn the body and throw the ashes into the nearest stream.'

The Mechs or Bodos are the western branch of the great Káchárí tribe, who in Dárjíling District inhabit the *tarái* lying immediately below the base of the hills. Mr. Hodgson describes the Mechs or Bodos, and the Dhimáls, as belonging to the same race; and their customs, religion, etc. appear to be nearly identical. There is a difference, however, in their languages, and also in the names of their deities. The Dhimáls, moreover, although inhabiting a part of the tract also occupied by the Mechs or Bodos, live in separate villages and without intermarriage. The Census Report distinguishes between these peoples, and returns the number of Mechs in Dárjíling District at 893, and the Dhimáls at 873. The Mechs formerly constituted a considerable proportion of the population of the *tarái* portion of Dárjíling; but the Deputy-Commissioner reports that

they are decreasing in numbers, leaving the District, and settling in Jalpáigurí. Dr. Hooker in his *Himálayan Journals* (vol. i. p. 100) states :—'Siligurí stands on the verge of the *tarái*, that low malarious belt which skirts the base of the Himálayas, from the Satlaj to Brahmakhund in Upper Assam. . . . Fatal as this tract is, especially to Europeans, a race inhabit it with impunity, who, if not numerous, do not owe their paucity of number to any climatic cause. These are the Mechs, often described as a squalid, unhealthy people, typical of the region they inhabit, but who are in reality more robust than the Europeans in India, and whose disagreeably sallow complexion does not indicate a sickly constitution. They are a mild, inoffensive people, industrious for Orientals, living by annually burning the *tarái* jungle and cultivating the cleared spots.'

As to their mode of cultivation, religion, manners, and customs, etc., I take the following extracts, in a condensed form, from a valuable monograph by Mr. B. H. Hodgson on the Koch, Bodo, and Dhimál people, published in the *Journal of the Asiatic Society of Bengal* for 1849, Part II. p. 702 *et seq.* :—'The condition or status of the Bodo and Dhimál people is that of nomadic cultivators of the wilds. For ages transcending memory or tradition, they have passed beyond the savage or hunter state, and also beyond the herdsman's state, and have advanced to the third or agricultural grade of social progress, but so as to indicate a not entirely broken connection with the precedent condition of things; for though cultivators, they are nomadic cultivators, so little connected with any one spot that their language possesses no name for village. Though dwelling in the wilds, wherein the people of the plains (Ahírs and Goálás) periodically graze immense numbers of buffaloes and cows, they have no large herds nor flocks of their own to induce them to wander; but, as agriculturists little versed in artificial renovating processes, they find in the exhaustion of the worked soil a necessity, or in the high productiveness of the new a temptation, to perpetual movement. They never cultivate the same field beyond the second year, or remain in the same village beyond from four to six years. After the lapse of four or five years, they frequently return to their old fields and resume their cultivation, if in the interval the jungle has grown well, and they have not been preceded by others. If they have been anticipated, or if the slow growth of the jungle does not give sufficient promise of a good stratum of ashes for the land when cleared by fire, they move on to

another site, new or old. If old, they resume the identical fields they tilled before; but never the old houses or site of the old village, that being deemed unlucky. In general, however, they prefer new land to old, and having still abundance of unbroken forest around them, they are in constant movement, more especially as, should they find a new spot prove unfertile, they decamp after the first harvest is got in. They are all in the condition of subjects of Nepál, Sikkim [now Dárjíling District], Bhután, or Great Britain, having no property whatever in the soil they till, and discharging their dues to the Government they live under (Sikkim for example)—1st, by the annual payment of one rupee per agricultural implement, for as much land as they can cultivate therewith (there is no land measure); and 2d, by a *corvée* or tribute of labour for the sovereign and for his local representative [where they are the subjects of native states]. It is calculated that they can raise from Rs. 30 to Rs. 40 of agricultural produce with one implement, so that the land tax is very light; and the *corvée* is more irksome than oppressive. . . .

'There is no separate calling of herdsman or shepherd, or tradesman or shopkeeper, or manufacturer or handicraftsman, in these primitive societies, which, although they admit no strangers among them, live on perfectly amicable terms with their neighbours, and can thus always procure, by purchase or barter, the few things which they require and do not produce themselves. . . . The Bodos and Dhimáls have no buffaloes, few cows, no sheep, a good many goats, abundance of swine and poultry, and some pigeons and ducks. They have no need, therefore, of separate herdsmen, unless it were swineherds, and these might be very useful in feeding their large store of pigs in the forest. But each family tends its own stock of animals, which is entirely consumed by that family, and no part thereof sold, though the neighbouring hill-men would gladly purchase pigs from them. They love not trade or barter further than is needful; and their need is confined to obtaining (besides rice) a few earthen and metallic culinary utensils, still fewer agricultural implements of iron, and some simple ornaments for their women—all of which are readily obtained at the Koch markets, in exchange for the surplus cotton and oil-seeds of their efficient agriculture. Each man builds and furnishes his own house, and makes the wooden implements he requires. He makes basketry for himself and family; whilst his wife spins, weaves, and dyes the clothes of the family, and brews the beer, which all the members freely consume. The Bodos and

Dhimáls are generally averse to taking service with, or doing work for, strangers, whether as soldiers, menials, or carriers. . . . Among their own communities, there are neither servants nor slaves, nor aliens of any kind. Though they have no idea of a common tie of blood, yet there are no diverse septs, clans, or tribes among them, nor yet any castes, so that all Bodos and all Dhimáls are equal.

'*Agriculture.*—The agricultural implements of the Dhimáls consist of an axe to fell the forest, a strong bill-hook to clear the underwood and to dig the soil, a spade for rare and more effectual digging, and lastly, a dibble for sowing the seed. The iron head of the axe is bought at the Koch markets, the haft being made at home. The bill-hook, which is also purchased in the Koch marts, is similar in shape to our English bill, but with the curved extremity or beak prolonged, and furnished with a straight downward edge of some three inches. The spade is the ordinary one of the plains, called the *kodáli*. The dibble is a wooden staff sharpened at the end, and about four feet long. The process of culture, emphatically called "clearing the forest," is literally such for the most part, and would be so wholly, but that several of the species of crops grown being biennial, a field is retained over the first year, so that the second year's work consists merely of weeding and re-sowing rice amid the other standing products. The characteristic work is the clearing of fresh land, which is done every second year. Amid the ashes of the burnt jungle, the seed is sown by a dibbler and a sower, the former of whom perforates the soil by sharp strokes of his pointed staff, so as to make a series of holes from one to two inches deep, and about a span apart; whilst the latter, furnished with a basket of mixed seeds, drops from four to six seeds into each hole, and covers them at the same time. All the various produce raised is grown in this promiscuous style. March, April, and May comprise the season for preparing and sowing the soil; and July, August, September, and October that for gathering the various products, save cotton, which is not gathered till December or January. The crops are reaped as they successively ripen: first cucurbitaceous plants, then greens, then the several edible roots, then the condiments, then the millets and pulse, next rice, then mustard, and last of all, cotton. . . . The cotton is a biennial of inferior quality; but it is the main crop, to the sale of which the Bodos and Dhimáls look to provide themselves with the greatest part of the rice they consume, for their own supply is very inadequate. . . . Upon the whole, the agriculture

of the Bodos and Dhimáls is conducted with as much skill as that of the lowland Kochs; with skill superior to most of their highland neighbours; and with pains and industry greatly above those of either highlanders or Kochs. . . . A peasant of the plains, using the plough, will earn twice or even thrice as much as a Bodo or Dhimál; and yet, owing to the wretched system of borrowing at enormous interest, he will not be nearly so well off. The Bodo or Dhimál, again, has abundance of domestic animals, and is, moreover, at liberty to eat the flesh of all save the cow; whereas the peasant of the plains has few animals, and of these he may only eat the goat. And lastly, the Bodo's industrious wife not only spins, but weaves and dyes all the clothes of the family, besides supplying it amply with wholesome and agreeable beer; whilst the peasant's wife in the plains does nothing but spin. The highland peasantry generally earn less than the Bodos or Dhimáls, and are proportionately worse off, though lightly taxed and exempt from the curse of the borrowing system. The Newár peasants, however, of the great valley of Nepál —even more industrious than the Bodos and Dhimáls, and more skilful too—earn more, and retain more, notwithstanding the heavy rent they pay to their landlord, who pays the light tax or Government demand on the land.

'*Dwellings.*—The Bodos and Dhimáls build and furnish their own houses without any aid of craftsmen, mutually assisting each other in the work. A dwelling-house is from 12 to 16 cubits long, by from 8 to 12 wide. A smaller house is erected opposite for the cattle; and if the family be large, two other domiciles like the first are built upon the other sides, so as to enclose an open quadrangle or yard. The houses are constructed of jungle grass, secured within and without by a trellis work of strips of bamboo. The roof has a high and somewhat bulging pitch, and a considerable projection beyond the walls. It also is made of wild grass, softer than that which forms the walls. There is only one division of the interior, separating the cooking and the sleeping portions of the house, which has no chimney or window, and but one door. From ten to forty such houses form a village. Furniture is very scant, consisting only of a rough bedstead (rare), some sleeping mats, a stool or two, and some swinging shelves, all of which are made at home. The household utensils are a few earthen vessels for carrying and holding water, some metallic cooking, eating, and drinking pots, some bamboo and cane baskets, and a couple of knives, to which must be

added the spinning, weaving, dyeing, and brewing utensils of the women. . . .

'*Clothing.*—The clothes are all made at home by the women. The Bodo women wear silk, produced by the castor-oil worm, which is reared by each family. The Bodo men and the Dhimáls of both sexes wear cotton only. Woollen is unknown, even in the shape of blankets. The manufactures are durable and good, and not inconveniently coarse—in fact, precisely such as the people require; and the dyeing is very respectably done with their own cochineal, *morindá*, and indigo, or with madder got from the hills—but all prepared by themselves. The female silk vest of the Bodo women is about $3\frac{1}{2}$ feet wide by 7 feet long, deep red, with a broad worked margin above and below of checked pattern, composed of white and yellow colours upon the red ground. The female garment of the Dhimáls differs only in material, being of cotton. The male dress of the Bodos and Dhimáls consists of two parts—an upper and a lower. The former is equivalent to the Hindu *chàdár*, and the latter to the Hindu *dhutí*. All cotton clothes, whether for males or females, are almost invariably white and undyed. Shoes are not in use, but a sort of sandals or sole covers are sometimes seen; these are of wood, and are made by the people themselves. Ornaments are rare, even amongst the women, who, however, wear small silver rings in their ears and noses, and heavy bracelets of mixed metal on their wrists. These are bought in the Koch marts, and are quite simple in form.

'*Food.*—Rice forms the chief article of vegetable food, wheat or barley being unknown even by name. *Ghí* or clarified butter is likewise totally unused, and oil only very sparingly. Salt, chilies, vegetables, plenty of rice (varied sometimes with maize or millet), and fish or flesh every second day, constitute a meal which the poor Hindu might envy, washed down as it is with a liberal allowance of beer. Plenty of fish is to be had from December to February, both inclusive, and plenty of game from January to April inclusive, though these people are not very keen or skilful sportsmen. They have the less need to turn hunters, as their domestic animals amply supply them with flesh food. They eat all animals, tame or wild, save oxen, dogs, cats, monkeys, elephants, bears, and tigers. Fish of all sorts, land and water tortoises, mungooses, civets, porcupines, hares, monitors of enormous size, wild hogs, deer of all sorts, rhinoceros, and wild buffaloes are amongst the wild animals they

pursue for their flesh. Milk is little used, but it is not eschewed as amongst the Gáros. Both Bodos and Dhimáls use abundance of a fermented liquor made of rice or millet. . . . The process of making this liquor is very simple. The grain is boiled and the root of a plant called *agaichito* is mixed with it; it is left to ferment for two days in a nearly dry state; water is then added, and the whole allowed to stand for three or four days, when the liquor is ready. They likewise freely use tobacco, but never opium nor hemp, nor distilled waters of any kind; upon the whole, I see no reason to brand them with the name of drunkards, though they certainly love a merry cup in honour of the gods at the high festivals of their religion. The ordinary manner in which a Bodo or a Dhimál passes the day is as follows. He rises at daybreak, and having washed himself, proceeds at once to work in his field till noon. He then goes home to take his chief meal of the day, after which he rests for an hour or so, and then resumes his labours till nightfall. On his return home he takes a second meal with his family, then chats a little over the fire, and goes to bed seldom later than two hours after dusk.

'*Social Laws.*—Living as the Bodos and Dhimáls have for ages in the condition of subjects to foreign governments, it need hardly be observed that they have no public laws or polity whatever, nor even any traces of that village economy which so pre-eminently distinguishes Indo-Aryan societies. Each little community is, however, under a head, who is called *grá* by themselves, and *mandal* by their neighbours. To the foreign government they live under, the *grá* is responsible for the revenue assessed upon the village, which he pays to the Rájá's representative or *chaudharí*. He is likewise answerable to the *chaudharí* for the keeping of the peace and for the arrest of criminals; but crimes of a deep dye are almost unknown, and breaches of the peace very rare. With regard to his own community, the head of the village has a general authority of voluntary rather than coercive origin; which, in cases of the least perplexity, is shared with the heads or elders of two or three neighbouring villages. By this tribunal offenders are admonished, fined, or excommunicated, according to the degree of their offence; the village priest being called in, perchance, to give a higher sanction to the award. The same tribunal seems to have almost exclusive cognisance of civil law, or the usages of the people in regard to inheritance, adoption, divorce, etc. Marriage is rather a contract than a

rite, and as such is dissoluble at the will of either party; and if the divorce be occasioned by the wife's infidelity, the price paid for her to her parents must be refunded by them. Dower is not in use, and women, in general, are deemed incapable of holding or transmitting property. All the sons get equal shares, nor is there any nice distinction of sons by marriage, adoption, or concubinage. Adoption is common and creditable, even if there be one son born in wedlock; concubinage is rare and discreditable. Daughters have no inheritance nor dower; but if their parents be rich, and give them marriage presents, such are held to be their own, and will be retained by them in event of divorce. Neither Bodo nor Dhimál may marry beyond the limits of his own people, and if he do, he is severely fined. Within those limits, only two or three of the closest natural ties are deemed a bar to marriage. In the event of divorce, the children belong to the father, or the sons to the father and the daughters to the mother. If the husband take the adulterer in the fact, he may beat him, and likewise the wife, but no more; thereafter he may, if he please, put his wife away, when she and her lover may continue to abide together as man and wife, without scandal, but without marriage rite. Chastity is prized in man and woman, married and unmarried, and as a necessary consequence women are esteemed and respected, and divorce and separation rare. Filial piety is not a marked feature among the Bodos and Dhimáls, nor perhaps the want of it. Sons, on marriage, and sometimes previously, quit the parental roof; but it is deemed shameful to leave old parents entirely alone, and the last of the sons who by his departure does so, is liable to fine as well as to disinheritance. Infanticide is utterly unknown, with every savage rite allied to it, such as human sacrifice, self-immolation, and others. On the contrary, daughters are cherished and deemed a source of wealth, for every man must buy his wife with coin or labour. There is no bar to re-marriage, and *satí*, or widow sacrifice, is a rite held in abhorrence.

'*Religion.*—The religion of the Bodos and Dhimáls is distinguished, like their manners and customs, by the absence of anything that is shocking, ridiculous, and incommodious. It lends no sanction to barbarous rites, nor does it hamper the commerce of life with tedious, inane, ceremonial observances. It takes less cognisance than it might advantageously do of those great sacraments of humanity, baptism, marriage, and sepulture, withholding all

sanction from the first, and lending to the other two, especially marriage, a less decided sanction than the interest of society demands. A Bodo or Dhimál is born, is named, is weaned, is invested with the *toga virilis*, without any intervention of his priest, who is summoned to marriages and funerals chiefly, if not solely, to perform the preliminary sacrifice which is indispensable to consecrate a feast; for no Bodo or Dhimál will touch flesh the blood of which has not been offered to the gods, and flesh constitutes a goodly proportion of the material of those feasts which solemnize funerals and weddings alike. The religion consists in the worship of the sun and moon and of the terrene elements. The hazards and the importance of agriculture to the Bodos and Dhimáls are sufficiently indicated by their creed; and to agriculture the three great festivals of the year have almost exclusive reference. Among all the numerous gods, Jupiter Pluvius, as typified by the rivers, commands a reverence, second to none with the Dhimáls, second to one or two only with the Bodos. Fire, however indispensable, agriculturally, for the clearing of the forest, is by no means equally reverenced; nor the earth which yields all; nor the noble forest, so cherished and in so many ways indispensable; nor the mountains, whence come these very rivers; nor even the sun and moon, which alone of the starry hosts are worshipped at all. All these deities are worshipped devoutly, but none with such earnestness as the rivers; and yet the rivers flow too low to allow of their waters being turned to irrigation, so that it is as an index of copious rains, upon which exclusively the Bodo and Dhimál crops are dependent, that the rivers are entitled to this reverence. Another class of deities, and a very important and characteristic one, I have denominated the "household gods," because the worship is conducted *inter parietes*. "National gods," however, would be the fitter term, for these are the original deities of the whole people; and though their worship be conducted at home, or in each house, the whole neighbourhood participates through the medium of the accompanying sacrifice and feast, and reciprocally at every householder's of the village, once a year in solemn pomp, and more frequently and quietly as occasion may require. A good many of the household or national divinities of the Bodos are elemental gods, chiefly rivers. Bátho, however, the chief deity of the Bodos, is not an elemental god, but he is clearly and indisputably identifiable with something tangible, viz. the *sij* plant or Euphorbia; though why that useless

and even exotic plant should have been thus selected to typify the godhead, I have failed to ascertain. Mainu or Mainang is the wife of Bátho, and equally revered with him. The supreme gods of the Dhimáls are termed Waráng-Beráng, literally, the old ones, or father and mother of the gods. They likewise are a wedded pair, whose proper names are respectively Páchimá and Timái or Timáng, of whom the latter is undoubtedly the Tístá river, and the former, I believe, the river Dharlá. The Bodos and Dhimáls have neither temples nor idols. Altogether, their religion belongs to the same primitive era as their habits and manners; it is void of offence or scandal, and if any judgment may be formed of it from the manner and character of its professors, is not without beneficial influences. Both Bodos and Dhimáls alike devoutly believe in witchcraft, of which they entertain a deep dread; and likewise in the influence of the evil eye, though this is much less dreaded than witchcraft. Omens are very slightly, if at all, heeded by either.

'*Religious Rites and Ceremonies.*—The rites of the Bodo and Dhimál religions are precisely similar, and consist of offerings, sacrifices, and prayers. The prayers are few and simple. They consist of invocations of protection for the people, their crops and domestic animals; deprecations of wrath when sickness, murrain, drought, blight, or the ravages of wild animals prevail; and thanksgivings when the crops are safely housed, or recent troubles are passed. The offerings consist of milk, honey, parched rice, eggs, flowers, fruits, and red lead or cochineal; the sacrifices of hogs, goats, fowls, ducks, and pigeons,—most commonly hogs and fowls. Sacrifices are deemed more worthy than offerings; all the higher deities, without reference to their supposed benevolence or malevolence, receive sacrifices, all the lesser deities offerings only. Libations of fermented liquor always accompany sacrifice, because sacrifice and feast are commutable words, and feasts need to be crowned by copious potations. Malevolence appears to be attributed to very few of the gods, though of course all will resent neglect; in general their natures are deemed benevolent, and hence the absence of all savage or cruel rites. All diseases, however, are attributed to supernatural agency. The sick man is supposed to be possessed by one of the deities, who racks him with pain as a punishment for impiety or neglect of the god in question. Hence, not the mediciner, but the exorcist, called *ojhá*, is summoned to the sick man's aid. After the repetition of certain invocations through the exorcist,

the god in question is asked what sacrifice he requires in order to spare the sufferer. He replies through the exorcist, and the animal named is forthwith vowed by the sick man, but is not paid till he recovers. On recovery the animal is sacrificed, and its blood offered to the offended deity.

'*Festivals.*—The great religious festivals of the Dhimál year are four. The first, called Shurkhár by the Bodos, and Haríjátá by the Dhimáls, is held in December-January, when the cotton crop is ripe. The second, which is named Wágaleno by the Bodos, who alone observe it, is held in February-March. The third, called Phulthepno by the Bodos, and Gavi-pujá by the Dhimáls, is celebrated in July-August, when the rice comes into ear. These festivals are consecrated to the elemental gods, and to the interests of agriculture. They are celebrated out of doors, generally on the banks of the river, whence attendance on them is called *hogron húdong* or *madái húdong*, "going forth to worship," in contradistinction to the fourth great festival, which is devoted to the household gods, and is celebrated at home. This latter festival, which is called Aihuno by the Bodos, and Páchimá-paká by the Dhimáls, is held in October. Due attention to these four annual festivals is deemed sufficient in prosperous and healthy seasons. But sickness or scarcity always beget special rites and ceremonies, suited to the circumstances of the calamity, and addressed more particularly to the elemental gods if the calamity be drought, or blight, or devastations of wild animals—to the household gods if it be sickness. Hunters and fishers, likewise, when they go to the chase, sacrifice a fowl to the sylvan gods; and lastly, those who have a petition to prefer to their superiors, conceive that a similar propitiation will tend to the fulfilment of their request.

'*Priesthood.*—The priesthood of the Bodos and Dhimáls is entirely the same, even to the nomenclature, which expresses the three sorts of clergy by the terms Dhámí, Deoshí, and Ojhá. The Dhámí is the district priest; the Deoshí the village priest; and the Ojhá the village exorcist. There is a Deoshí in nearly every village. Over a small circle of villages a Dhámí presides, who has a vaguely defined but universally recognised control over the Deoshís of his district. The priests are native Bodos or Dhimáls, in no way distinguished from the rest of the community, either before or after induction. Occasionally the son will succeed the father in the office, but rarely; and whoever chooses to qualify himself may

become a priest, and may afterwards give up the profession if he sees fit. The connection between pastor and flock is full of liberty for the latter, who collectively can eject their priest if they disapprove of him, or individually can desert him for another if they do not approve of him. He marries and cultivates like his flock; and all that he can claim from them in return for his services is, first, a share of every animal sacrificed by him, and secondly, three days' labour a year from each adult male, towards the clearing and cultivation of his land. Whoever thinks fit to learn the forms of offering sacrifice and invocations, can become a priest. Ojhás do not stand on the same footing with Dhámís and Deoshís, and are remunerated solely by fees. Into either office, however, of priest or exorcist, the form of induction is similar, consisting merely of an introduction by the priests or exorcists of the neophyte to the gods on the first occasion in which he officiates. The formula is literally that of an introduction, and is as follows:—"This is (so and so), who proposes, O ye gods! to dedicate himself to your services; mark how he performs the rites, and if correctly, accept them at his hands."

'*Customs.*—The customs of both Bodos and Dhimáls have a great similitude, owing to their perfect simplicity. At births, the mother herself cuts the navel-string; no midwives are found. But deliveries are almost always easy, and death in child-bed is scarcely known. The idea of uncleanness occasioned by births, and by deaths also, is recognised; but the period of uncleanness and segregation is very short, and the purificatory rites consist merely of bathing and shaving, performed by the parties themselves. The infant is named immediately after birth, or as soon as the mother comes abroad, which is always in four or five days after delivery. There are no family names, or names derived from the gods. Most Bodos and Dhimáls bear meaningless designations, or any passing event of the moment may suggest a significant term. Children are not weaned so long as the mother can suckle them, which is always from two to three years, sometimes more. When a Bodo or Dhimál comes of age, the event is not solemnized by any rite or social usage whatever. Marriage takes place at maturity, the male being usually from twenty to twenty-five years of age, and the female from fifteen to twenty. The parents or friends negotiate the marriage, though in so simple a state of society it cannot be but that parties have frequently met, and are well known to each other. The parents of the girl invariably demand and receive a price in

return for their daughter, which varies from Rs. 15 to Rs. 45 among the Bodos, and from Rs. 10 to Rs. 15 among the Dhimáls. A youth who has no means of discharging this sum must go to the house of his father-in-law elect, and there literally earn his wife by the sweat of his brow, by labouring for mere food for a term of years. The legal nature and effects of the nuptial contract have been already explained under the head of social laws (pp. 72, 73). The marriage ceremony is little perplexed with forms. After the essential preliminaries have been arranged, a procession is formed by the bridegroom elect and his friends, who proceed to the bride elect's house, attended by two females specially appointed to put red lead or oil on the bride's head when the procession has reached her house. There a refection is prepared, after partaking of which the procession returns, conducting the bride elect to the house of the groom's parents. So far the same rite is common to both Bodos and Dhimáls; the rest is peculiar to each. Among the Dhimáls, the Deoshí now proceeds to propitiate the gods by offerings. Dáta and Bedáta, the deities who preside over wedlock, are invoked, and offerings of betel-leaf and red lead are made to them. The bride and groom elect are next placed side by side, and each furnished with five *páns*, with which they are required to feed each other, while the parents of the groom cover them with a sheet, upon which the Deoshí, by sprinkling holy water, sanctifies and completes the nuptials. Among the Bodos, the bride elect is anointed at her own house with oil; either the elders or the Deoshí perform the sacred part of the ceremony, which consists in the sacrifice of a cock and a hen, in the respective names of the groom and the bride, to the sun; the groom next salutes the bride's parents, and the bride similarly attests her future duty of reverence and obedience towards her husband's parents; then the nuptials are complete. A feast follows both with the Bodos and Dhimáls; but it is less costly among the former than among the latter —as is said, because the higher price paid for his wife by the Bodo bridegroom incapacitates him for giving a costly entertainment.

'The Bodos and Dhimáls both alike bury the dead immediately after decease, with simple but decent reverence, although no fixed burial-ground nor artificial tomb is in use to mark the last resting-place of those most dear in life, because the migratory habits of the people would render such usages nugatory. The family and friends form a funeral procession, and bear the dead in silence to the grave. The body being interred, a few stones are piled loosely upon the

grave, to prevent its disturbance by jackals rather than to mark the spot; some food and drink are placed upon the grave, and the party disperses. Friends are purified by mere ablution in the next stream, and at once resume their usual cares. The family are unclean for three days, after which, besides bathing and shaving, they need to be sprinkled with holy water by their elders or priests. They are then restored to purity, and forthwith proceed to make preparations for a funeral banquet by the sacrifice of a cock to Bátho, and a hog to Mainú, by the Bodos, and to Pachimá and Timáng by the Dhimáls. When the feast has been got ready and the friends are assembled, before sitting down they all repair once again to the grave, when the nearest of kin to the deceased, taking an individual's usual portion of food and drink, solemnly presents them to the dead with these words: "Take and eat. Heretofore you have eaten and drunk with us; you can do so no more. You were one of us; you can be so no longer. We come no more to you; come you not to us." The party then proceed to the river and bathe, after which they repair to the banquet, and eat, drink, and make merry. A funeral costs the Dhimáls from Rs. 4 to Rs. 8; something more to the Bodos, who practise more formality on the occasion, and to whom is peculiar the singular leave-taking of the dead just described.

'*Character.*—The character of the Bodos and Dhimáls, as will be anticipated from the foregoing details, is full of amiable qualities, and almost entirely free from such as are unamiable. They are intelligent, docile, free from all hard or obstructive prejudices, honest and truthful in deed and word, steady and industrious in their own way of life; but apt to be mutable and idle when first placed in novel situations, and to resist injunctions injudiciously urged with dogged obstinacy. They are devoid of all violence towards their own people or their neighbours, and though very shy of strangers, are tractable and pleasant when got at, if kindly and cheerfully drawn out. . . . The Bodos and Dhimáls are good husbands, good fathers, and not bad sons; and those who are virtuous in these most influential relations are little likely to be vicious in less influential ones, so that it need excite no surprise that these people, though dwelling in the forest apart from the inhabitants of the open country, are never guilty of black-mailing, or of *dákáiti* (gang-robbery); while among themselves, crimes of deep dye are almost unknown. To the ostentatious hospitality of many nations, whose violence

against their neighbours is habitual, they make no pretensions; but among their own people they are hospitable enough, and towards the stranger invariably equitable and temperate.'

THE KOCHS, OR RAJBANSIS, as they are now called, are numerous in the *tarái* Sub-division, and are returned in the Census Report as numbering 23,124, or 25 per cent. of the entire population. This aboriginal tribe first rose into power about the close of the fifteenth or the commencement of the sixteenth century, under one Hájo, who founded the Koch kingdom on the ruins of the ancient Hindu kingdom of Kámrúp; which, according to Mr. Hodgson, 'once included the western half of Assam on one side, and the eastern half of the Morang on the other, with all the intervening country reaching east and west from the Dháneswarí river to the Konki, whilst north and south it stretched from Dálingkot to Gorághát.' In other words, the Koch Ráj extended from 88° to 93½° east longitude, and from 25° to 27° north latitude, Kuch Behar being its metropolis, and its limits being co-equal with the famous, yet obscure, Kámrúp of the Tántrás. Bráhmanism was introduced among the Kochs in the time of Visu, Hájo's grandson, who together with his officers and all the people of condition apostatized to Hinduism. A divine ancestry for the chief was manufactured by the Bráhmans; the converts abandoned the despised name of Koch, and took that of Ráibansí—literally, 'of the royal kindred;' and the name of the country was altered to Behar. 'None but the low and mean of this race,' says Mr. Hodgson, 'could longer tolerate the very name of Koch; and most of these, being refused a decent status under the Hindu *régime*, yet infected, like their betters, with the disposition to change, very wisely adopted Islám in preference to helot Hinduism. Thus the mass of the Koch people became Muhammadans, and the higher grades Hindus; both style themselves Rájbansís. A remnant only still endure the name of Koch; and of these but very few adhere to the language, creed, and customs of their forefathers.' A more detailed account of the Kochs will be found in my Statistical Account of the State of Koch or Kuch Behar, which may be regarded as the present nucleus of the race, and concerning which Mr. Hodgson states that 'Hájo's representative still exercises *jura regalia* in that portion of the ancient possessions of the family.'

HINDU CASTES.—Whilst the aboriginal tribes, such as the Lepchás, Nepálís, and Bhutiás, are (with the exception of the few Mechs,

Dhimáls, etc., who all reside in the plains) almost entirely confined to the hills division of the District, the recognised Hindu castes are, as a whole about double as numerous in the *tarái* as in the hilly tract, while the semi-Hinduized castes are, almost without exception, denizens of the *tarái* Sub-division. The following is a list of 63 Hindu castes and semi-Hinduized castes met with in Dárjíling District, arranged as far as possible according to the rank which they hold in local public esteem, together with their occupations, etc. The figures indicating the number of each caste are taken from Mr. C. F. Magrath's District Census Compilation for Dárjíling.

(1) Bráhmans; members of the priesthood; also employed as Government officials and in private service. Some are also landholders, and among the Nepálís are a number of Bráhman cultivators. The Census Report of 1872 returns the total number of Bráhmans at 1002, of whom 98 are returned as in the *tarái*, and 904 in the Hills Sub-division; the majority of the latter are, presumably, cultivating Bráhmans. (2) Bábhan, a Behar caste, called also Bhuinhar, or cultivating and *zamíndárí* Bráhmans; they are believed, however, to be formed by an intermixture of Bráhmans with an inferior caste. A full account of this caste, to which almost all the great landholders of Behar belong, will be found in the Statistical Account of Sáran District. The Census Report only returns 6 of this caste as living in Dárjíling District, all in the Hills Sub-division. (3) Kshattriya; the second or warrior caste in the ancient Hindu social system. At the present day, it is believed there are no pure Kshattriyas in Bengal, although several castes lay claim to this rank. The caste returned as 'Khatri' in the Census Report is the great trading caste of Northern India. Their number in Dárjíling District is 145, of whom 28 are found in the *tarái* and 117 in the hills, nearly all at the Station of Dárjíling. (4) Rájput; employed in military service, and as guards, policemen, and doorkeepers; some are also landholders and cultivators. From their military profession they claim the rank of Kshattriyas, and this is usually accorded to them by the natives of Bengal. Number in Dárjíling District 8972, of whom 7218 are found in the *tarái* and 1754 in the Hills Sub-division. (5) Baidyá; hereditary physicians by caste occupation, but many of them have now abandoned their traditional employment. Only 4 members of this caste are returned in the Census Report as dwelling in Dárjíling within the hills tract; none are returned in the *tarái*. (6) Káyasth; the writer caste of Bengal,

employed as writers and clerks in Government and private service. They are largely engaged by the tea-planters, and are therefore most numerous in the hills. Total number in Dárjíling 44, of whom 8 are returned as in the *tarái* and 36 in the Hills Sub-division. (7) Márwárí; up-country traders and merchants, claiming to belong to the great Vaisya or trading caste of ancient India, which is generally believed to be extinct. They are 10 in number in Dárjíling, all at the Headquarters Station. (8) Agarwálá; up-country traders and merchants, also claiming to be Vaisyas; 18 in number, of whom 9 are returned as in the *tarái* and 9 in the Hills Sub-division. (9) Oswál; also an up-country trading caste; 34 in number, viz. 21 in the *tarái* and 13 in the hills. (10) Nápit or Hajjam; barbers; 435 in number, viz. 405 in the *tarái* and 30 in the hills. (11) Kámár; blacksmiths; 456 in number, viz. 63 in the *tarái* and 393 in the hills. (12) Kumár; potters; 342 in number, viz. 264 in the *tarái* and 78 in the hills. (13) Baniyá; traders and merchants; 230 in number, viz. 163 in the *tarái* and 67 in the hills. (14) Gandha-baniyá; grocers and spice dealers, an offshoot of the preceding caste; 17 in number, viz. 2 in the *tarái* and 15 in the hills. (15) Paliwál; traders and merchants; 7 in number, all in the hill tract. (16) Rabí; another trading caste; 7 in number, viz. 1 in the *tarái* and 6 in the hills. (17) Támbulí; growers and sellers of *pán* or betel leaf by caste occupation, but most of them have now taken to trade or money-lending; 181 in number, viz. 178 in the *tarái* and 3 in the hills. (18) Báruí; *pán* growers and *pán* sellers who still follow their hereditary employment; 342 in number, viz. 57 in the *tarái* and 285 in the hills. (19) Telí or Tilí; originally oil-pressers and sellers by caste occupation, but most of them have now discarded their hereditary employment and taken to trade and grain dealing; 412 in number, viz. 301 in the *tarái* and 111 in the hills. (20) Agurí; a respectable mixed cultivating caste; 15 in number, all found in the *tarái*. (21) Kaibartta; this caste is divided into two sections, the first of which follows agriculture as a profession, and is esteemed, whilst the main occupation of the latter is fishing, and it is accordingly despised. The Census Report returns the number of both sections of Kaibarttas in Dárjíling at 125, all found in the *tarái*. (22) Málí; gardeners, flower sellers, and workers in pith; 143 in number, viz. 123 in the *tarái* and 20 in the hills. (23) Goálá; milkmen and cowherds; 420 in number, viz. 346 in the *tarái* and 74 in the hills. (24) Halwái; sweetmeat makers and confectioners;

90 in number, viz. 43 in the *tarái* and 47 in the hills. (25) Kándu; sellers of parched or cooked vegetable food, and of preparations made from rice, such as *chirá*, etc.; 90 in number, viz. 64 in the *tarái* and 26 in the hills. (26) Vaishnav; not a caste, but a sect of Hindus professing the abnegation of caste, and the principles inculcated by Chaitanya, a Vishnuvite religious reformer of the sixteenth century. Some Vaishnavs are well-to-do traders and landowners, while others are mere wandering religious beggars. Number, 222; all found in the *tarái* Sub-division. (27) Sanyásí; like the foregoing, this is not a caste, but a sect; they are Sivaite religious mendicants, and profess to reject caste; 303 in number, viz. 36 in the *tarái* and 267 in the hills. (28) Koerí; cultivators; 61 in number, viz. 34 in the *tarái* and 27 in the hills. (29) Kurmí; cultivators; 260 in number, viz. 15 in the *tarái* and 245 in the hills. (30) Tántí; weavers; 644 in number, viz. 632 in the *tarái* and 12 in the hills. (31) Ganesh; weavers; 890 in number, all found in the *tarái* Sub-division. (32) Sonár; goldsmiths and jewellers, an offspring from the Baniyás, but held in much lower respect than the parent caste; 371 in number, viz. 22 in the plains and 349 in the hills, principally in and about the Station of Dárjíling. (33) Subarna-baniyá; merchants, bankers, and dealers in gold and silver, also an offshoot from the Baniyá caste; 49 in number, viz. 2 in the plains and 47 in the hills. (34) Darzí; tailors; 541 in number, viz. 29 in the plains and 512 in the hills. (35) Dhobá; washermen; 85 in number, viz. 22 in the plains and 63 in the hills. (36) Surí or Sunrí; wine sellers and distillers by caste occupation, but many have now abandoned their hereditary employment, and taken to grain dealing and general trade; 486 in number, viz. 376 in the *tarái* and 110 in the hills. (37) Rájbansí Koch; cultivators, fishermen, and labourers. This is the most numerous of all the castes in the District, and numbers more than all the other Hindu castes put together. The Census Report returns the Rájbansí Kochs among the semi-aboriginal castes, and gives their number in Dárjíling at 23,124, viz. 23,015 in the *tarái* and 109 in the hills. At the present day nearly all the Kochs are, in religion, either Hindus or Muhammadans. A detailed description of this tribe will be found in my Account of the State of Kuch Behar (see also p. 80). (38) Dhánuk; domestic servants, cultivators, and labourers; 19 in number, viz. 5 in the *tarái* and 14 in the hills. (39) Káhár; an up-country caste belonging to the Behar District, principally employed as palanquin

bearers; 49 in number, viz. 6 in the *tarái* and 43 in the hills. (40) Ruilá; cultivators; 17 in number, all in the *tarái* Sub-division. (41) Behárá; palanquin bearers and domestic servants; 26 in number, viz. 24 in the *tarái* and 2 in the hills. (42) Chunárí; lime-burners; 53 in number, all found in the *tarái* Sub-division. (43) Nuniyá; salt-workers; 33 in number, viz. 18 in the *tarái* and 15 in the hills. (44) Dhuniyá; weavers; 6 in number, all in the hills Sub-division. (45) Jugi; weavers; 100 in number, viz. 81 in the *tarái* and 19 in the hills. (46) Chandáls; cultivators, fishermen, and labourers; 292 in number, all found in the *tarái* Sub-division. (47) Chapwál; weavers; 61 in number, all found in the *tarái* Sub-division. (48) Jaliyá; fishermen; 44 in number, all found in the *tarái* Sub-division. (49) Keut; fishermen; 10 in number, all found in the Hills Sub-division. (50) Málá; fishermen and boatmen; 26 in number, viz. 23 in the *tarái* and 3 in the hills. (51) Tior; fisherman; 1 in number. (52) Báití; matmakers and musicians; 14 in number, all found in the Hills Sub-division. (53) Bárí; labourers and cultivators; 14 in number, viz. 11 in the *tarái* and 3 in the hills. (54) Baurí; labourers and cultivators; 100 in number, viz. 95 in the *tarái* and 5 in the hills. (55) Bhuiyá; labourers and cultivators; 6 in number, all found in the hills. (56) Chámár; skinners, leather dealers, and shoemakers; 285 in number, viz. 64 in the *tarái* and 221 in the hills. (57) Dom; matmakers, fishermen, and village watchmen; 88 in number, viz. 72 in the *tarái* and 16 in the hills. (58) Dosádh; labourers, cultivators, fishermen, and matmakers; 68 in number, viz. 61 in the *tarái* and 7 in the hills. (59) Mál; snake-charmers; 2 in number in the hills; none in the *tarái*. (60) Musáhar; labourers; 62 in number, viz. 57 in the *tarái* and 5 in the hills. (61) Kaorá; swineherd; 1 in number. (62) Hárí; swineherds and sweepers; 761 in number, viz. 759 in the *tarái* and 2 in the hills. (63) Mihtár; sweepers; 226 in number, viz. 53 in the *tarái* and 173 in the hills.

IMMIGRATION AND EMIGRATION.—Besides the Nepálís, the immigrants into Dárjíling District principally consist of people from the neighbouring Districts and from other parts of Lower Bengal. Those of them who take to agriculture settle down permanently in the *tarái* Sub-division, and mix freely with the other inhabitants of the plains. The remainder of the Bengalí immigrants consist principally of clerks, *munshís*, domestic servants, etc.; these nearly all come to the Headquarters Station, but they do not settle down permanently,

and while in the District live altogether apart from the general population. There is no emigration from the District, if the Lepchás and Mechs are excepted, who are both migratory tribes, continually on the move. In 1871 the Deputy-Commissioner reported that there were comparatively few Lepchás and Mechs in the District; the former having left British territory in large numbers, and gone to Independent Sikkim; while the latter had crossed the Tístá river in the *taráí*, into the neighbouring District of Jalpáigurí.

No statistics exist showing the extent to which immigration is carried on. The Deputy-Commissioner, however, reported to me in 1871 that the population of Dárjíling District had probably doubled within the previous twenty-five years, and that it was daily on the increase. He also expressed his opinion that, unless the Lepchás and Mechs settle down to plough cultivation, the probabilities are that in a few years the cultivators in the hills will consist almost entirely of Nepálís and Bhutiás, the former being the most numerous; and in the plains, of Rájbansís and Bengalís, in about equal numbers. In 1872 the Nepálís were ascertained by the Census to form 34·1 per cent. of the District population.

No predatory clans or castes are found within the District. Amongst the Nepálís, the Murmís have the credit of being a predatory class in their own country, but in Dárjíling they live peacefully by agriculture.

RELIGIOUS DIVISION OF THE PEOPLE.—Divided according to religion, the majority of the population of this District are Hindus, the remainder consisting of Muhammadans, Buddhists, Christians, a very few Bráhma Samáj followers, and a sprinkling of aboriginal tribes still professing their primitive forms of faith. The Census Report of 1872 thus returns the population of the different religions. The Hindus number 39,181 males, and 30,650 females; total, 69,831, or 73·7 per cent. of the District population. Proportion of males in total Hindus, 56·1 per cent. The greater portion of the Hindus are cultivators; the remainder being either clerks, or interpreters in Government service or on the tea plantations, or merchants, or petty dealers. There is no regular assembly of the Bráhma Samáj, or reformed theistic sect of Hindus, in Dárjíling District. There are, however, a few persons holding the Bráhma Samáj doctrines, who are immigrants residing at the Station of Dárjíling, as clerks to Government. The Census Report does not distinguish between them and the orthodox Hindus.

THE MUHAMMADANS number 3566 males, and 2682 females; total, 6248, or 6·6 per cent. of the total District population; proportion of males, 57·1 per cent. The Muhammadans are employed in a similar manner to the Hindus—the majority as cultivators, and the others as clerks or as traders. The faith of Islám makes but little progress; and the Musalmán population, which is principally found in the *tarái* Sub-division, is to be accounted for by immigration from the Districts to the south. As a rule, the Muhammadans of Dárjíling are comfortably off. They are not actively fanatical, and the Deputy-Commissioner does not think that there are any Wahábís or Faráizís among them. No new Musalmán sects are springing up.

BUDDHISTS—males 791, and females 577; total, 1368, or 1·5 per cent. of the District population; proportion of males, 57·8 per cent. These figures are taken from the General Census Report, but they are manifestly below the truth. In the separate District Compilation by Mr. Magrath, the Buddhists are not shown in the table according to religions; but in the table showing the ethnical distribution of the people, 3433 persons are returned as Buddhists, besides 401 returned according to nationality as Bhutiás, who are also Buddhists. They are most numerous in the Dálingkot tract lying to the east of the Tístá river, which was annexed from Bhután at the termination of the war in 1864. The Buddhists or Bhutiás are employed either as cultivators, or as coolies or porters; some of them are priests or interpreters, and a few trade.

CHRISTIANS—males 318, and females 238; total, 556, or ·6 per cent. of the District population; proportion of males in Christian population, 57·2 per cent. The Europeans, who form the great bulk of the Christian population, are for the most part employed as proprietors or managers of tea gardens, or are in Government service. Deducting 532 as the number of Europeans and Eurasians, there remains a total of 104 as representing the native Christian population. The Deputy-Commissioner in 1871 reported to me that a German Mission had been established for many years in Dárjíling; and although it met with no visible success in the shape of conversions, it doubtless paved the way for future work by translating portions of the Scriptures into the Nepálí and Lepchá languages. Since then (1871) a branch of the Presbyterian Mission has been established in the District.

The remainder of the population are not separately classified in

the Census Report, but are returned under one heading as 'others.' They consist of Buddhists (who are not all returned as such in the Census Report), and of aboriginal tribes and races who still adhere to their primitive forms of faith. The Census Report returned their numbers as follow:—Males 9201, and females 7508; total, 16,709, or 17·6 per cent. of the District population; proportion of males in the total 'other' population, 55·1 per cent.

DIVISION OF THE PEOPLE INTO TOWN AND COUNTRY.—The population of the District is entirely rural, the Station of Dárjíling being the only town, unless Karsiáng, situated in the lower hills twenty miles to the south, may be also considered a town. Neither of these places, however, contains a population of over five thousand souls, so as to be returned separately in the Census Report. The Deputy-Commissioner states that it is difficult to draw a comparison between the native inhabitants of the town of Dárjíling and that of the rural tracts. The latter live solely by agriculture; the former by trade or manual labour, or as clerks, domestic servants, etc. There can be no doubt that the people of the town are far better off than the population of any other part of the District; although some individuals, rich in herds and produce, are to be found who are wealthier and possessed of more influence than any unit among the townspeople. On the whole, the town population of the District may be said to have far greater weight in proportion to its numbers than that of the rural parts; and it unquestionably gives far more work to the courts. This, of course, is owing to the nearness of the courts to the townspeople. There is a scarcely perceptible inclination on the part of the people to gather into the town. The Deputy-Commissioner reports that, if there were a greater demand for labour, the Bhutiás and Lepchás would probably to a certain extent abandon agriculture in the country, in favour of living in, or in the vicinity of, the town.

DARJILING TOWN AND STATION is situated near the northern boundary of the hills division of the District, in 27° 2′ 48″ north latitude, and 88° 18′ 36″ east longitude. It contains an ordinary population of about four thousand souls, but being the great summer resort in Bengal from the heat of the plains, the number necessarily fluctuates considerably according to the season of the year. Dr. Hooker thus describes the place (*Himálayan Journals*, vol. i. p. 113):—'Dárjíling Station occupies a narrow ridge, which divides into two spurs, descending steeply to the bed of the Great Ranjít,

up whose course the eye is carried to the base of the great snowy mountains. The ridge is very narrow at the top, along which most of the houses are perched, while others occupy positions on its flanks. The valleys on either side are at least six thousand feet deep, forest clad to the bottom, with very few and small level spots, and no absolute precipice; from their flanks project innumerable little spurs, occupied by native clearings. . . .

'The hill station or sanatarium of Dárjíling owes its origin (like Simlá, Másurí, etc.) to the necessity that exists in India of providing places where the health of Europeans may be recruited by a more temperate climate. Sikkim proved an eligible position for such an establishment, owing to its proximity to Calcutta, which lies but 370 miles to the southward; whereas the north-west stations mentioned above are upwards of a thousand miles from that city. Dárjíling ridge varies in height from 6500 to 7500 feet above the level of the sea; 8000 feet being the elevation at which the mean temperature most nearly coincides with that of London, viz. 50°. Sikkim, moreover, offered the only available spot for a sanatarium throughout the whole range of the Himálayas, east of the extreme western frontier of Nepál. It is a protected State, owing no allegiance except to the British Government, who, after the Rájá had been driven from the country by the Gurkhás in 1816, replaced him on the throne, and guaranteed him the sovereignty. Our main object in doing this was to retain Sikkim as a fender between Nepál and Bhután; and, but for this policy, the aggressive Nepálís would, long ere this, have possessed themselves of Sikkim, Bhután, and the whole Himálayas eastwards to the borders of Burmah.

'From 1817 to 1828 no notice was taken of Sikkim, till a frontier dispute occurred between the Lepchás and Nepálís, which, according to the terms of the treaty, was referred to the British Government. During the arrangement of this quarrel, Dárjíling was visited by a gentleman of high scientific attainments, Mr. J. W. Grant, who pointed out its eligibility as a site for a sanatarium to Lord William Bentinck, then Governor-General. He dwelt especially upon its climate, proximity to Calcutta, and its accessibility; on its central position between Thibet, Bhután, Nepál, and British India; and on the good example a peaceably conducted and well-governed Station would be to our turbulent neighbours in that quarter. The suggestion was cordially received, and the Rájá was requested to cede a tract of country which should include Dárjíling for an equivalent

in money or land. His first demand was unreasonable; but on further consideration he ceded Dárjíling unconditionally, and a sum of £300 per annum' [afterwards increased to £600] 'was granted to him, as an equivalent for what was then a worthless uninhabited mountain. In 1840, Dr. Campbell was appointed as Superintendent of the new Station, and was entrusted with the charge of the political relations between the British and Sikkim Governments.

'Once established, Dárjíling rapidly increased. Allotments of lands were purchased by Europeans for building dwelling-houses; barracks and a *bázár* were formed, with accommodation for invalid European soldiers; a few official residents, civil and military, formed the nucleus of a community, which was increased by retired officers and their families, and by temporary visitors in search of health, or the luxury of a cool climate and active exercise. . . . There were not a hundred inhabitants when the ground was transferred; there are now (1849-50) four thousand.' [A Census taken in 1869 returned a population of the Dárjíling municipality, which comprises the area originally ceded by Sikkim, viz. 90,000 acres, at 22,707.] 'At the former period there was no trade whatever; there is now (1849-50) a very considerable one in musk, salt, gold-dust, borax, soda, woollen cloths, and especially in ponies. The trade has been greatly increased by an annual fair, which Dr. Campbell established at the foot of the hills, to which many thousands of natives flock from all quarters, and which exercises a most beneficial influence throughout the neighbouring territories.'

Since Dr. Hooker's time, the prosperity of Dárjíling has received a further development from the tea industry. The influx of European capital introduced by the tea planters opens out a practically boundless source of wealth. Its advantages as a sanatarium, and as a summer resort from the scorching heat of the plains, are now thoroughly appreciated; and the opening of the Northern Bengal State Railway, now (1876) in course of construction, will bring Dárjíling within easy journey of Calcutta, and thus supply a want which has long been felt of rapid and comfortable communication between the two places.

A MILITARY DEPOT, consisting of barracks for about 150 men, stands on a hill some five hundred feet above the Station, and is occupied by European invalids during the hot months. Some private dwelling-houses in the same locality have been adapted

for the accommodation of a battery of artillery. The situation, although very bleak, is a healthy one.

DARJILING MUNICIPALITY.—There is only one municipality in the District. Its limits are co-extensive with those of the tract originally ceded by the Rájá of Sikkim in 1835, already mentioned, and it is estimated to cover 88,320 acres, or 138 square miles. It has to provide funds for the maintenance of a conservancy and police establishment in the town and Station, and for the maintenance of a hundred and twenty miles of roadway in the country. The municipal income for the year ending 31st March 1871 was estimated at £2010, 6s. od., supplemented by a grant of £1998, 2s. od. from the Town Improvement Fund, making a total revenue of £4008, 8s. od. The total municipal expenditure for the year was estimated at the same amount as the total revenue. The population within municipal limits was returned by a Census taken in 1869 at 22,707 souls. Details of this population have been already given on a previous page (p. 40).

MATERIAL CONDITION OF THE PEOPLE.—Dárjíling District has, of late years, made rapid strides in general prosperity, and, as a body, the people are very well off. The Deputy-Commissioner, however, states that they would be in still better circumstances, if they were sufficiently educated to be able to cope with and resist the rapacity of the *mahájans*, or grain merchants and usurers.

DRESS.—The dress worn by a well-to-do shopkeeper or cultivator depends to a great extent upon the locality in which he resides. In the hill tract, the clothing worn by a shopkeeper consists of a cotton waistcloth reaching below the knee (*dhutí*), with either a woollen close-fitting coat (*chápkán*), or a flannel jacket worn under a cotton coat. In the plains, the shopkeepers wear simply the cotton dress usually worn in Bengal, and when travelling will sometimes dispense with the greater portion of that. The dress and ornaments worn by the Lepchás have been already described in the account of that people (pp. 49, 50). The Nepálís wear close-fitting coats and loose trousers (*paijámás*) made of *batisá* cloth; while the Bhutiás for the most part affect woollen coats, either black, red, yellow, or striped—called respectively *ku naku*, *gahchu ku*, *sábu ku*, *gangtá ku*. The Thibetán Bhutiás are distinguished by their boots—the boot and stocking in one. The Bhután Bhutiás and the Lepchás occasionally wear stockings knitted in the town. The Hindu and Musalmán inhabitants in the *tarái* Sub-division dress

principally in cotton, much like the other natives of the Bengal plains; but the quality of their clothing generally shows that they are better off than their neighbours to the south. Some of the cultivators, especially among the Mechs, wear a cloth made from the silk of the castor-oil silk-worm; others, again, wear cotton clothes imported from the southern Districts, or woven from homespun cotton.

DWELLINGS.—The well-to-do shopkeepers generally live in Dárjíling town, where each occupies one or more rooms in a barrack, built with brick walls and a shingled roof. For each room he pays a rent to the municipality varying from Rs. 3 to Rs. 8 a month (6s. to 16s.), according to the situation of the barrack. In the *tarái* Sub-division, at Phánsidevá and the other large *bázárs*, the shopkeepers generally live in separate houses, each containing one or two rooms; in some instances constructed of brick and mortar, and in others of substantial mat-work, with a thatched roof. The Lepchá, Nepálí, and Bhutiá cultivators live in houses of mat walls, with roofs of split bamboo or thatched grass. The Nepálí houses are constructed flush with the ground; whilst those of the Lepchás and Bhutiás are raised on posts. A Bhutiá or Lepchá house usually consists of four rooms, whilst the house of a Nepálí has generally only two. There is nothing that can be called furniture in the houses in the rural parts of the Hills Sub-division, except that some of the better class of cultivators have wooden bedsteads. A well-to-do shopkeeper in the town has his blanket and bedding, but no furniture in his shop. The cultivators in the *tarái* Sub-division live in houses built of posts and bamboos, with mud-plastered walls and a thatched roof; each house ordinarily consists of a single room, without anything that can be called furniture.

FOOD.—The food consumed by well-to-do Lepchás and Bhutiás consists of hill rice, Indian corn, pulses, vegetables, fish, beef, pork, and fowls: they drink *murwá*, or unfermented hill beer, at any hour and to any quantity available. The poorer classes content themselves with Indian corn, jungle vegetables, and yams, which grow indigenously in the hills in great quantities. The food of the Nepális is similar to that of the Lepchás and Bhutiás, with the exception that they will not touch cow's flesh. The Deputy-Commissioner estimates that the living expenses of a well-to-do shopkeeper — either a Márwárí or Bengalí trader — in the town of Dárjíling, including municipal, house, and shop rent, vary from about Rs. 15 to Rs. 25 (£1, 10s. 0d. to £2, 10s. 0d.) per month.

The Márwárí and Bengalí shopkeepers of the town generally live by themselves without wife or children, who are usually left at their own village homes. . The same authority estimates that the living expenses of the household of a well-to-do cultivator in the hills, including the market value of home-produced provisions, amount to from Rs. 10 to Rs. 20 (£1 to £2) per month, according to the number of his family. In the plains, the cost is much less, and a husbandman here can comfortably support a family on from Rs. 5 to Rs. 10 (10s. to £1) per month, according to the size of his household.

AGRICULTURE: RICE CULTIVATION.—Rice forms the staple agricultural product of the plains or *tarái* portion of the District. It is divided into two great classes—namely, *áman* or *haimantik*, which comprises the winter rice harvest; and *áus* or *bhadaí* rice, so called after the name of the Hindu month (Bhádra) in which it is reaped. *Aman* or *haimantik* rice is usually sown in nurseries in the months of Baisákh and Jaishtha (April—June), transplanted in Ashar and Srában (June—August), and reaped in Agrahayan and Paush (November—January). *Aus* or *bhadaí* rice is sown broadcast in the months of Chaitra and Baisákh (March—May), and harvested in the month of Bhádra (August—September). These two great classes are divided into numerous species, which in many instances are again subdivided into further varieties.

AMAN OR HAIMANTIK RICE.—The twenty-four principal kinds of *áman* or *haimantik* rice grown in the Dárjíling *tarái* are the following:—(1) *Báchi*, a coarse grain; (2) *rashná*; (3) *páni sáli*; (4) *kallár*; (5) *málsárá*; (6) *neniá*, the best description of rice, known to Europeans as 'table rice;' (7) *katár*; (8) *birnáphul*; (9) *khewáur*; (10) *soná kári*; (11) *soná jhol*; (12) *dál kachu*; (13) *pákhuri*; (14) *bhusár*; (15) *kártik sáli*, an early variety of *áman* rice, so called from its ripening in the month of Kártik (October—November); (16) *sakai kallár*; (17) *harintor*; (18) *sulpohan*; (19) *borni*; (20) *sokan sinní*; (21) *bindisar*; (22) *bántiá*; (23) *dánt hilki*; and (24) *háthi dánt*. Of the above-mentioned twenty-four species, No. 6, or *neniá áman*, produces the finest grain. This species is subdivided into the following six minor varieties:—(*a*) *Dáns neniá*; (*b*) *kálá neniá*; (*c*) *tulá panji*; (*d*) *hepsi*; (*e*) *bánsmatí*, a strong, sweet-scented grain; and (*f*) *lakshmi bilás*. Next in point of quality is No. 5, or *málsárá áman*, which is subdivided into the three following kinds:—(*a*) *Phutki málsárá*; (*b*) *tilwá málsárá*;

and (*c*) *sakái málsárá.* No 1, or *báchi áman,* a coarse rice, is subdivided as follows :—(*a*) *Sor báchi ;* (*b*) *dokár báchi ;* (*c*) *sindur kutuá ;* (*d*) *lelpá báchi ;* (*e*) *manohar báchi ;* and (*f*) *gunjar báchi.* No. 19, *borni áman,* has the following three sub-varieties :—(*a*) *Dáng borni ;* (*b*) *jholká borni ;* and (*c*) *burhi borni.*

Aus or Bhadai Rice, which forms the autumn crop, comprises the following eleven principal varieties :—(1) *Sonni ;* (2) *champá ;* (3) *sasárphul ;* (4) *kánáibási ;* (5) *jámirá ;* (6) *chopár ;* (7) *bhadaí málsárá ;* (8) *boldár ;* (9) *chengái tukri ;* (10) *niláji ;* and (11) *petpáká.* The poorer classes of people mostly use the *bhadaí* rice as food, reserving the *haimantik* for sale. *Haimantik* rice is first sown out in nurseries in high land, and is afterwards transplanted into a well-watered marshy soil. *Bhadaí* rice is not transplanted.

In the hilly portion of the District, rice is not grown by any means to such an extent as in the *tarái.* The names by which the two chief varieties are known are *chhotá dhán* and *barú dhán,* the former being grown in comparatively small quantities as compared with the latter. The *chhotá dhán* of the hills corresponds with the *bhadaí dhán* of the plains ; it is sown in low lands in March, and reaped throughout September. The *barú dhán* corresponds with the *haimantik* rice of the plains ; it is sown on high lands in May, and reaped throughout November.

No marked improvement has taken place of late years in the quality of rice grown in the District, but a considerable extension has taken place in the area under rice cultivation. In 1870 an attempt was made to introduce Carolina rice into the District ; the accounts received as to the result of the experiment are conflicting. An English planter informed the Deputy-Commissioner that his sample produced magnificent looking plants, which overtopped all the neighbouring native rice ; the ears, however, contained no grain. A native husbandman, on the other hand, spoke well of his sample, and added that, but for his not having received the seed in proper time, the yield would have been better. The Deputy-Commissioner is of opinion that the acclimatized produce of the pure Carolina grain would be an improvement on the native rice. The lands throughout the *tarái,* formerly in jungle, are being rapidly taken up for rice cultivation, owing to the increase of population. The Deputy-Commissioner states that this extension of the cultivated area would doubtless proceed much more rapidly, could the Forest Department see it to be advantageous

to relinquish any of the reserved forest tracts. These forests afford cover to wild elephants and tigers, the former of which do great damage to the crops, and the latter frequently carry off the cultivators. The extension of rice cultivation is due not to the substitution of that crop for inferior cereals, but to the clearing and reclamation of jungle land. In the hilly tracts, the extension of rice cultivation is confined to the Nepálís, who generally select for tillage a comparatively level site near the banks of a river or water-course, and lay it out in successive terraces, one above the other. Their system of agriculture is decidedly in advance of the primitive *júm* method followed by the Mechs and other aboriginal people, which has been already described in my account of those tribes (pp. 67–70). It appears probable that, as available jungle land for this nomadic method of tillage becomes more and more scarce, the aboriginal tribes will gradually learn the use of the plough from the Nepálís, and will adopt the higher system of cultivation practised by that class of the community.

Two methods are adopted in husking rice. Rice husked by the first process is called *ushná chául*. The paddy is first soaked in water, then boiled, afterwards dried, put in a mortar (*chhám*), and husked with a rice pedal (*gahen*). Rice husked by the second method is called *alwá chául;* the paddy being simply dried in the sun, and then husked in a mortar in the same manner as in the other process. Rice is usually husked by the first-mentioned process, as it involves less loss in the operation. The following are the local names in the *tarái* for the different stages of rice, from the seed to its state as cooked food:—Rice seed, *dhán bihán;* transplanted rice, *ropá dhán;* rice husked after boiling, *ushná chául;* rice husked after being simply dried in the sun, *alwá chául;* cooked rice, *bhát*. In the hill tract, the generic Bhutiá term for rice is *biá;* rice seed or unhusked rice is called *reh;* young sprouting rice, *biá changpo;* the fully-grown rice plant ready for reaping, *biá chho;* husked rice, *chhum;* cooked rice, *tah*.

The Different Preparations made from Rice are the following:—(1) *Gundá*, rice fried and ground into flour; made only for private consumption, and not sold in the village markets; (2) *muri*, paddy roasted in sand and husked; sold at the rate of 1½d. a pound or 2 *ánnás* a *ser;* (3) *pithá*, rice husked by the sun-dried process, mixed with water, pounded and kneaded into balls, and cooked in boiling water; made only for private consumption and not sold;

(4) *bháká*, rice pounded into flour, mixed with a little water, placed in a brass or bell-metal vessel, over which a cloth is tied, and then steamed over hot water; this preparation is not generally sold, but is usually bartered at the rate of two and a half cups full of rice for one cup full of *bháká*; (5) *puá*, rice soaked in water, afterwards pounded into a pulp, mixed with treacle and water, and cooked either with oil or *ghí* (clarified butter); price from 1½d. to 1¾d. a pound, or from 2 *ánnás* to 2½ *ánnás* a *ser*. From paddy or unhusked rice are made the following:—(6) *Khái*, paddy roasted in hot sand and afterwards husked; price from ½d. to ¾d. a pound, or from 8 *pie* to 1 *ánná* a *ser*; (7) *chirá*, paddy first steeped in water for a day, afterwards parched and husked, and then pounded; price from ½d. to ¾d. a pound, or from 8 *pie* to 1 *ánná* a *ser*. The liquid preparations made from rice are—(8) *Pachwái*, or fermented rice beer; is supposed not to be sold, but a certain amount of trade is carried on in it at the rate of about 3d. or 2 *ánnás* a quart bottle. In the hills, the Bhutiás make an unfermented liquor (9) called *chhang*; and the Nepálís, a distilled spirit (10) called *raksi* (arrack), both of which are made in the villages for home consumption only. The price of arrack in the Dárjíling *bázár* is about a shilling or 8 *ánnás* the quart bottle.

Other Cereal Crops.—The other cereal crops grown in Dárjíling District (the hill portion) are the following:—*Bhuttá* or Indian corn, divided into *chhotá* and *barí* varieties, according as it is little or extensively cultivated. The *chhotá bhuttá* is sown in low lands in March, and reaped in all September; *barí bhuttá* is sown in high lands in May, and reaped in all November. *Márwá* is also divided into *chhotá* and *barí*, the former being sown in low lands in March, and reaped in September, and the latter sown in high lands in May, and reaped in November. *Chhobiyá*, sown on lands of middling elevation in April, and reaped in all October. Wheat, sown in November after the reaping of the *barí* crops, and reaped in May.

Green Crops.—*Turi* or mustard, sown in Aswin and Kártik (September—November), and reaped in Mágh (January—February). *Kalái*, sown in Srában (July—August), and cut in Agrahayan and Paush (November—January). *Pán* or betel-leaf, the cultivation of which is perennial. Tobacco, sown in Aswin and Kártik (September—November), and cut in Phálgun (February—March). The only green crops ordinarily cultivated by natives in the hilly tract are

two kinds of beans, called by the Bhutiás *tikrip* and *tigbi*. They are sown in Jaishtha (May—June), and cut a little after the reaping of the *barí* crops in Agrahayán (November—December).

FIBRES.—Cotton is rather extensively cultivated by the Mechs along and under the lower ranges of hills. The following brief description of this cultivation is quoted from a memorandum by Dr. Campbell, Superintendent of Dárjíling, dated 8th July 1851:—'The soil best adapted for cotton cultivation is a light blackish loam, occasionally mixed with gravel. After producing one crop of cotton, the soil requires to be resuscitated by lying fallow. The forest or jungle being cut down in the cold season, the whole of the timber and leaves are burned on the ground, and the ashes scattered over it. In March and April the land is finally prepared with some care. In May and June the seed is sown, and the crop is picked in November and December. After one crop of cotton, a rice crop is taken the following year, after which the land is allowed to run fallow for five years, when it is overgrown with heavy jungle and again becomes fit for the growth of cotton. Manure, except the ashes of the burnt jungle, is never used; irrigation is not practised, and the crop is generally a sure one. The only causes of failure I can ascertain are very heavy rains in October when the pod is forming, and a dry month of May when the seed is sown. The latter, however, is of very rare occurrence. When the seed suffers from drought, a second sowing is made. The seed is dibbled in by itself in the best cultivation, but it is sometimes sown broadcast along with rice. The former method of cultivation is called *kíl*, the latter *jhagrí*. The quality of the produce is said to be not affected by growing with rice. The produce is always poor when weeding is neglected, and a well-cultivated field is weeded three or four times during the growing season. The seed requires to be carefully kept from damp, which destroys or impairs its reproductive powers. A tract of land measuring 300 square yards is estimated to yield 2½ *maunds* or 200 lbs. of cotton with the seed. It is calculated that the pods contain two parts of seed in weight to one of cotton.'

Pát or jute is grown in the *tarái* portion of the District; sown in Chaitra and Baisákh (March—May), and cut in Srában and Bhádra (July—September).

MISCELLANEOUS CROPS.—*Ikshu* or sugar-cane, sown in dry land in Chaitra (March—April), and cut in Bhádra (August—September) and subsequent months. Potatoes, sown in dry land in Chaitra

(March—April), and dug up in Aswin and Kártik (September—November). *Iláchi* or cardamoms, a very valuable crop in the hills portion of the District, grown principally by Nepálí cultivators. It is sown from Chaitra (March—April) up to the setting in of the heavy rains about Ashár (June—July). The crop takes nearly three years to ripen; it is transplanted and cultivated with great care and attention. It is usually cut about the end of Agrahayán (December).

The most important crop in the hills division of the District is tea; but as this cultivation is almost entirely carried on by European planters, I defer a detailed account of it for a subsequent section, under the heading of 'Imported Capital' (pp. 164–176), where also will be given a brief account of the Government cinchona plantation.

AREA, OUT-TURN OF CROPS, ETC.—The total area of Dárjíling District is 1234 square miles. The *tarái* or plains Sub-division occupies an area of 173,856 acres, or 271·65 square miles; of which in 1871, 62,115 acres, or 97·06 square miles, were returned as under cultivation; 100,875 acres, or 157·62 square miles, as cultivable, but not actually under cultivation; and 10,866 acres, or 16·98 square miles, as barren and uncultivable waste. The estimated area under the different crops in the *tarái* in 1871 was returned to me by the Deputy-Commissioner as follows:—Rice, 47,737 acres; cotton, 3818 acres; pulses, 1909 acres; jute, 3818 acres; oil-seeds, 1324 acres; sugar-cane, 1409 acres; tea, 1900 acres; vegetables, 50 acres; fruit trees, 50 acres; other crops, 100 acres: total cultivated area, 62,115 acres, or 97·06 square miles. The hills Sub-division occupies an area of 615,321 acres, or 961·44 square miles; of which in 1871, 22,453 acres, or 35·08 square miles, were returned as under cultivation; 456,945 acres, or 713·98 square miles, as capable of cultivation but not actually under tillage; and 135,923 acres, or 212·39 square miles, are barren and incapable of cultivation. The estimated area under the different crops in the Dárjíling hills in 1871 was returned as follows:—Rice, 6147 acres; *márwá*, 4083 acres; *bhuttá* or Indian corn, 2233 acres; oil-seeds, 40 acres; potatoes, 174 acres; tea, 9000 acres; cinchona, 300 acres; vegetables, 11 acres; fruit trees, 3 acres; cotton, 58 acres; other crops, 404 acres: total cultivated area, 22,453 acres, or 35·08 square miles. Including both the *tarái* and the hills, the estimated cultivated area of Dárjíling District in 1871 amounted to 84,568 acres, or 132·14 square miles; the cultivable but as yet uncultivated area

to 557,820 acres, or 871·59 square miles; and the uncultivable waste to 146,789 acres, or 229·36 square miles.

In the *tarái*, land is measured by the *hál*. This term properly means the quantity of land which can be brought under cultivation by a single plough and pair of oxen, and is considered equal to 20 *bighás*, or 6⅔ acres; comprising 16 *bighás* or 5⅓ acres of *haimantik*, and 4 *bighás* or 1⅓ acres of *bhádai* rice land. From such a holding, in the case of good land, a fair out-turn would be 3 *putis* or 36 *maunds* (equal to 26 hundredweights) of *haimantik*, and half a *puti* or 6 *maunds* (equal to 4⅓ hundredweights) of *bhadaí* paddy. The total out-turn from a *hál* of land, estimated at 20 *bighás* or 6⅔ acres, is said by the people to vary from 40 to 50 *maunds* (equal to from 29 to 36½ hundredweights), equal to from 2 to 2½ *maunds* a *bighá*, or from 4⅓ to 5½ hundredweights per acre. The Deputy-Commissioner believes this estimate to be much too low, and considers that 6 *maunds* of paddy per *bighá*, or 13 hundredweights per acre, is not more than a fair out-turn from good land. The rice crop, if sold at harvest time, will not fetch more than 12 *ánnás* a *maund*, or 2s. a hundredweight; whereas, if held back for a time, it will realize at least R. 1 per *maund* or 2s. 8½d. per hundredweight. Second crops are not obtained from the same land in the *tarái*. In the hills, the cultivators know nothing of land measurements; even rents are paid in the shape of a tax upon houses, regulated according to the number of the inmates. The Deputy-Commissioner states that he has been informed that an area of 80 *háths* × 80 *háths* (a Bengalí standard *bighá* of 14,400 square feet) of medium land should yield from 1 to 2 *maunds* of paddy, equal to from 2⅛ to 4⅓ hundredweights per acre; and a *bighá* of best land, 4 *maunds* of paddy, equal to 8¾ hundredweights per acre. This estimate appears to be too low. The Deputy-Commissioner himself considers that a *bighá* of land in the Dárjíling hills, in a favourable situation and cultivated by a Nepálí husbandman, will yield as large an out-turn as the best land in other hills, or from 5 to 6 *maunds* of paddy, equal to from 11 to 13 hundredweights per acre. At the conclusion of a favourable harvest, paddy can be obtained in the hills at the rate of 1½ *maunds* for a rupee, or 2s. a hundredweight; while payment in advance will secure 2 *maunds* for a rupee, or at the rate of 1s. 4d. a hundredweight. It is not usual to take a second crop off the same land in one year; but in some instances a crop of wheat is grown after the paddy has been reaped. The Deputy-Commissioner estimates that

the produce of fairly good land should yield a return to the cultivator of Rs. 5 or Rs. 6 a *bighá*, equal to from £1, 10s. 0d. to £1, 16s. 0d. an acre per annum.

CONDITION OF THE CULTIVATORS.—In the *tarái* lands a farm of from 8 to 10 *háls*, or from 160 to 200 *bighás*, equal to from 53 to 66 acres, would be considered a very large holding; and one of 1 *hál* or 20 *bighás* (6⅔ acres), a very small one. A holding containing 1 *hál* or 20 *bighás* for each able-bodied male adult in a cultivator's family would yield a comfortable maintenance for his household. A pair of oxen is supposed to cultivate 1 *hál*, which is taken to be about 20 *bighás;* but the Deputy-Commissioner is of opinion that a single pair of cattle cannot plough more than 15 *bighás* or 5 acres. A holding consisting of 1 *hál* of land would not make its proprietor so well off as a respectable retail shopkeeper, nor would it enable him to live as well as a man drawing Rs. 8 or 16s. a month. The cultivators as a body are in debt, but not deeply so. The larger *jotdárs*, who hold estates of 200 *bighás* and upwards directly from the Government, are also in debt, some of them very heavily. The Deputy-Commissioner in 1871 estimated that seven-eighths of this class were in debt.

In the hills, the cultivators, as already mentioned, have no knowledge of land measurements. A husbandman, if asked what he would consider a large field, would probably say one in which 2 *muris* or 4 *maunds* (equal to 3 hundredweights) of seed can be sown; and similarly, in regard to what he would think a small field, would say one in which only 5 *patis* or 20 *sers* (40 lbs.) of seed can be sown. There are 20 *patis* in a *muri*, and one *pati* of seed will yield 1½ *maunds* of paddy. According to this estimate, a large field thus indicated by the cultivator would, taking the out-turn at 6 *maunds* of paddy per *bighá*, be one of 10 *bighás* in extent, and a small field one of 1¼ *bighás*. The Deputy-Commissioner does not consider that the actual produce of 15 *bighás* or 5 acres in the Dárjíling hills would make a cultivator so well off as a respectable retail dealer. But a man who had 15 *bighás* or 5 acres under cultivation would be sure to have other sources of income besides the sale of the rice from his fields. He would keep pigs and cows, etc., and would, as a matter of fact, be quite as well off as a retail shopkeeper. The produce from 15 *bighás* or 5 acres of land would yield its proprietor nearly Rs. 8 or 16s. a month; and indeed the proprietor of such a holding might be considered to have at least double this

income. It is estimated that among the cultivating class in the hills not more than one in four is in debt.

THE DOMESTIC ANIMALS in the *tarái* are—oxen used in agriculture; buffaloes reared for their milk and for sale; and goats and pigs reared for food. An ordinary cow costs Rs. 8 or Rs. 9, or from 16s. to 18s.; a pair of common oxen from Rs. 16 to Rs. 24 (£1, 12s. 0d. to £2, 8s. 0d.); a pair of buffaloes from Rs. 20 to Rs. 40 (£2 to £4); sheep (imported), about Rs. 1/8 (3s.) each; kids, from 8 to 12 *ánnás* (1s. to 1s. 6d.) each; young pigs from R. 1 to Rs. 1/4 (2s. to 2s. 6d.) each; and full-grown hogs, from Rs. 5 to Rs. 6 (10s. to 12s.) each. In the hills, the domestic animals consist of sheep, cows, oxen, buffaloes, pigs, goats, and poultry. The Nepálí cultivators use a few oxen for their ploughs, but most of the animals are reared either for food or for trading purposes. The value of a cow depends upon the place where it is bought. In the rural parts away from the Station, a good cow can usually be bought for Rs. 20 (£2). In Dárjíling town a cow can never be obtained for less than Rs. 30 (£3), and at times, when there is a sudden increase of the English population, as in the season, a good cow will fetch Rs. 50 (£5). The Sikkim cows are believed to be the best. Oxen are worth from Rs. 20 to Rs. 30 (£2 to £3) a pair; a buffalo with calf, Rs. 30 (£3), without calf, Rs. 20 (£2); a male buffalo, Rs. 20 to Rs. 25 (£2 to £2, 10s. 0d.); Thibetán sheep, from Rs. 1/8 to Rs. 3 (3s. to 6s.) each; Nepálí sheep, from Rs. 2 to Rs. 3 (4s. to 6s.) each; sucking pig, R. 1 (2s.); young pig, Rs. 5 (10s.); full-grown hog, Rs. 15 (£1, 10s. 0d.).

THE AGRICULTURAL IMPLEMENTS in use in the plains consist of (1) the *hál* or plough; (2) *joyál* or yoke; (3) *mai* or clod-crusher; (4) *bidá*, a large rake or harrow for weeding and clearing the plants from jungle; (5) *háth bidá*, a hand rake; (6) *kurish*, a wooden mallet for breaking any clods left by the *mai*; (7) *kodali* or hoe; (8) *basilá*, a small adze; (9) *dáo*, a large knife or bill-hook for fencing and clearing jungle; (10) *dauki* or *kurpi*, a spud; (11) *penáti*, an ox-goad. The cost of all these implements is about Rs. 3/8 or Rs. 4 (7s. or 8s.). The entire capital required for the purchase of a pair of plough oxen and the implements enumerated above may be set down at Rs. 25 (£2, 10s. 0d.). In the hills it is only the Nepálí cultivators who use the plough, all the others following the nomadic system of cultivation known as *júming*, by which a piece of forest land is selected and cleared, heavily cropped for a year or two till

the soil shows signs of exhaustion, when it is abandoned, a new site selected and cleared, and the same process repeated *de novo*. The implements required for this rude mode of tillage, with their Bhutiá names, are as follow:—(1) *Takchi*, a hoe; (2) *tarí*, an axe; (3) *so-o*, a curved knife or bill-hook; (4) *ban*, a straight long knife; (5) *lakhfiyak* or rake; (6) *karjá*, a hook for uprooting weeds.

WAGES.—The Deputy-Commissioner, in his report to me in 1871, states that up to that time wages in the *tarái* had not much altered from what they were in former days; but it was expected that a rise would take place, owing to the increased demand for labour on the tea plantations in the hills. The rates of wages prevailing in 1871 were as follow:—Coolies and agricultural day-labourers received 2 *ánnás* 8 *pie* or 4d. a day, together with their food. There are no smiths or bricklayers in the *tarái*, and only a few carpenters, who make the common country ploughs and do other rough work. They are rarely employed by the month, and are usually paid by the job. The Deputy-Commissioner has occasionally paid carpenters Rs. 10 (£1) per month, for rough work on cross-country bridges. In the hill tract, wages of all classes of labourers, artisans, and domestic servants have somewhat increased of late years. In 1871 the Deputy-Commissioner reported to me that the rate of wages then current was about twenty-five per cent. above that which ruled twenty years previously. The wages current in 1871 in the Station and tea plantations of Dárjíling were as follow:—Coolies, either men or women, from Rs. 5 to Rs. 7 (10s. to 14s.) per month; masons, from Rs. 10 to Rs. 14 (£1 to £1, 8s. 0d.) per month; and carpenters from Rs. 12 to Rs. 18 (£1, 4s. 0d. to £1, 16s. 0d.) per month. A Dhángar coolie, *i.e.* one accustomed to carry a palanquin or chair (*jampán*), will in the Station during the season make Rs. 12 (£1, 4s. 0d.) a month. A Bhutiá coolie, from his strength in carrying heavy loads, etc., can always make his 4 *ánnás* (6d.) a day.

PRICES.—In 1871 the Deputy-Commissioner returned the ordinary price of good cleaned rice at Rs. 1. 6. 0 per *maund*, or 3s. 9d. a hundredweight; and of ordinary coolie's rice at Rs. 1. 4. 0 per *maund*, or 3s. 5d. a hundredweight. During the famine of 1866, the price of common rice in the Dárjíling *tarái* rose as high as Rs. 5 per *maund*, or 13s. 8d. per hundredweight. The ordinary price of paddy or unhusked rice in 1871 is returned by the Deputy-Commissioner at 10½ *ánnás* per *maund*, or 1s. 9½d. per hundredweight.

Barley, Indian corn, wheat, indigo, or sugar-cane are not grown in the *tarái*. Distilled rice spirit, known by the common name of *sharáb* or *mad*, fetches from 4 to 8 *ánnás* (6d. to 1s.) a quart bottle. Prices of rice are considerably higher in the hills than in the *tarái* Sub-division of the District. In 1871, the Deputy-Commissioner returned the price of the best table rice, only used by Europeans, at Rs. 5 per *maund*, or 13s. 8d. per hundredweight; and of the cheapest rice eaten by coolies at Rs. 2. 4. 0 per *maund*, or 6s. 1d. a hundredweight. Paddy or unhusked rice is not ordinarily procurable in the Dárjíling *bázár*. During the Bengal famine of 1866, the price of common rice in the Dárjíling hills rose to Rs. 5 per *maund*, or 13s. 8d. per hundredweight; and of the best table rice to Rs. 8 per *maund*, or £1, 1s. 10d. per hundredweight. Indian corn sells in the Dárjíling *bázár* at about Rs. 1. 8. 0 per *maund*, or 4s. 1d. per hundredweight; rice spirit at 8 *ánnás* (1s.) a quart bottle; and *marwá* beer at 2 *ánnás* (3d.) per bottle.

WEIGHTS AND MEASURES. — The local weights and measures current in the *tarái* are as follow:—*Adhá* (or half) *chhaták*=1 oz. (avoirdupois); *chhaták*=2 oz. $0\frac{32}{35}$ drs.; *ádha* (or half) *poá*=4 oz. $1\frac{1}{2}$ drs.; *poá*=8 oz. 3 drs.; *ádhá* (or half) *ser*=1 lb. 0 oz. $7\frac{1}{4}$ drs.; *ser* or *seer* =2 lbs. 0 oz. $14\frac{1}{2}$ drs.; *arhai* (or two and a half) *sers*=5 lbs. 2 oz.; *pánch* (or five) *sers*=10 lbs. 4 oz.; *maund* or 40 *sers*=82 lbs. Measures of quantity:—*Kathá*, a measure for grain, containing one *ser* or upwards; *bojhá* or *bhár*, a measure for wood. Measures of time:—The day is divided into four watches or *prahars* of three hours each; the first six hours of the day are known as *ujání prahar*, midday as *du prahar*, and the last six hours as *bháti prahar*. The night is also divided into four similar watches. Measure of distance:—*Kos* or *kros*, about two miles.

In the hills the following are the standards for measuring grain: —1 *tophi*=8 handsful; 8 *tophi*=1 *pe* in Bhutiá, or *palí* in Nepálí =4 *sers*; 20 *pe* or *palí*=1 *muri*=2 *maunds*. Meat, etc. is weighed in a scale similar to the English steelyard, consisting of a long stick with a shifting weight of the following denominations:—*Sánchung chi* or 1 *sánchung*=$\frac{1}{3}$ of a *ser*; *sánchung ní* or $\frac{2}{3}$ of a *ser*; *sánchung sum* or 1 *ser*. The weight is graduated up to 15 *sánchungs* or 5 *sers*. Measures of time:—The Bhutiás divide their year into twelve months, their months into thirty days, and each day into six divisions, viz. *nim chisá*, morning; *ním tohthin*, 10 o'clock; *nim phe*, 12 o'clock; *nim khaiye*, 3 o'clock; *nim jájo*, before sunset; *nim*

geh, sunset. Distance is computed by time, thus:—*Tho lam* or morning road, a distance which can be got over in a morning by 10 o'clock; *nim phi lam*, half a day's journey, which can be finished by noon; *shaksá lam* or night road, a distance so long that at the end of it the traveller must stop for the night.

AGRICULTURAL AND LANDLESS DAY-LABOURING CLASSES.—The only agricultural or other labourers who live entirely by wages are immigrants from other Districts. The actual cultivators in the *tarái* Sub-division are either *prajás* or *thikáddrs*. The *prajás* are nearly identical with the *krishán* or agricultural labourers in the Districts to the south. They cultivate the land of others on a *metayer* tenure; receiving an advance of seed or of money from the *jotdár*, or superior holder, who also supplies all agricultural implements. The *prajá* only finds the labour, and in return for this receives a half-share of the produce. The *thikáddrs* pay a money rent for their lands, and of course retain the whole of the produce for their own use and benefit. The *thikáddri* system is said to be gradually coming into general operation. Women do not often work in the fields in the *tarái*, but children of ten years of age and upwards are commonly employed on agricultural labour. In the Hills Sub-division of the District, with the exception of the coolies at the Station of Dárjíling, there is no class of day-labourers who neither possess nor rent any land of their own. Women are largely employed in the fields and tea plantations. Children are not so employed, except during the leaf-picking season, when they can always obtain work on the plantations.

SPARE LAND.—There is a good deal of spare land in the Dárjíling *tarái*. Some of it is held by lessees under the Waste Land Rules (described below); and a great portion is made up of forests, which are either private property, or are under the administration and supervision of the Forest Department. These forests are in many cases full of wild beasts, whose ravages cause much of the surrounding land to lie waste, although otherwise fit for cultivation. The Deputy-Commissioner, in his report to me, states that the great hope for the *tarái* consists in the fact that the lands are being rapidly taken up by European planters, who will soon buy up many of the private forests and fell them for clearings. Measures might perhaps be taken by the Forest Department for preventing its tracts being left as an undisturbed resort for wild animals. There is no *zamíndár* in the District; the *jotdár*, or grantee under the Waste

Land Rules, holds his land directly from Government, and lets it out in parcels either to a *prajá* or a *thikádár*, as mentioned above. There is also a large extent of available spare land in the hills division of the District.

LAND TENURES.—The following paragraphs, describing the different varieties of land tenure met with in Dárjíling District, are quoted from a valuable report on the subject by Mr. J. Ware Edgar, C.S.I., Deputy-Commissioner of the District, dated 26th September 1874. The length of the report compels me to slightly condense some of its passages, but I have endeavoured as far as possible to adhere to Mr. Edgar's exact words.

'Dárjíling District may be divided into five distinct revenue tracts, viz.:—(1) The old hill territory stretching from the Sikkim frontier to the foot of the hills below Pankhabárí, an irregular strip of land about twenty-four miles long and from five to six miles wide, hitherto supposed to contain 138 square miles. This comprises the tract originally ceded by the Sikkim Rájá in 1835. (2) The tract granted to Chebu Lámá and his family, situated in the north-west of the District, and containing about 115 square miles. This was annexed in 1850, in consequence of the treatment received by Drs. Campbell and Hooker from the Sikkim Darbár. (3) The two strips of hill land, one lying to the west of the old hill territory, and extending to the Nepál frontier; the other lying to the east of the old hill territory, and extending to the Tístá. The area of these two strips of land has hitherto been supposed to be about 253 square miles; both of these tracts were also annexed in 1850. (4) The *tarái*, also annexed in 1850; area, rather more than 271 square miles. (5) The tract to the east of the Tístá formerly known as the Dáling Sub-division; area, 485 square miles. This was taken from Bhután after the war of 1864. Each of these five tracts has different systems of tenure; in some of them, two or more co-exist. I shall therefore take up each by itself, give a brief history of it, and an account of its present state.

(1) 'THE OLD HILL TERRITORY.—For some short time after the cession of the old Dárjíling territory in 1835, there was not much demand for land; and the applications which were made were dealt with by the Superintendent at his discretion. In 1838 a large number of applications for land for building sites led to the issue by Government of a set of rules for the grant of lands, dated 4th September 1839. These rules provided that the conditions of any

grants made previously by the Superintendent should be binding on Government, but that in future, land should be given only as follows: —(1) Land suited for building locations, for which purpose a space of two hundred yards broad, on either side of the principal road from Karsiáng to Dárjíling, was specially reserved. (2) Cleared spaces of undefined size, to be reserved for *bázárs*, at Pankhabárí, Karsiáng, Maháldirám, and Dárjíling. (3) Land not required for either of the above purposes, but available for farming leases.

'The building leases, according to the original rules, were to be in perpetuity, subject to a rent of Rs. 50 (£5) for a full location, which was to be a hundred yards square, unless the Superintendent considered that a larger area was for any reason required. The Court of Directors, however, modified these terms by limiting the period of lease to 99 years; but before these orders were received, 65 full locations, and ten half locations, had been allotted in perpetuity. According to the rules, each full location ought to have had an area of 10,000 square yards, and each half location of 5000 square yards; but this limitation was disregarded from the first, and the average size of each full location was about seven acres, or 34,160 square yards. In 1841, the rule as to area was changed, and the site of a full location fixed at 40,000 square yards. After the receipt of the orders of the Court of Directors mentioned above, 76 full locations, 45 half locations, and 24 quarter locations were granted for terms of 99 years. Under the rule of 1841, the area of each full location should have been a little more than eight acres; but this rule was not observed, and there were locations of more than sixteen acres. This matter was brought to the notice of the Board of Revenue in 1863, in connection with some charges against an officer of dealing irregularly with land; and in the Board's letter, No. 70, dated 16th July, it was stated that the irregularity must be remedied. A report on the subject was submitted by the District Officer in December 1863, but beyond this nothing seems to have been done. I find, too, that the area actually held by some grantees of building sites is much greater than they are entitled to according to their title-deeds. For example, the title-deed of one location describes the length and breadth of the plot to be 200 × 200 yards. The area actually held is more than 16 acres. Another title-deed states the length of the location to be 100 yards, and the breadth 175 yards. This would give an area of a little less than $3\frac{1}{2}$ acres, while the grantee actually holds more than 14 acres. The holders of location leases were

allowed the option, under the rules of 1859, of commuting them into fee-simple, at the rate of twenty years' purchase of their annual rent; and 85 locations have been commuted under these rules, for payments aggregating £6453. Although the rules of 1859 were for all other purposes superseded by the Waste Land Rules of 1862, commutations of location rents have been made down to the present time. The total area of rent-paying locations, as shown in the District books, is 844½ acres, and of those commuted into fee-simple, 502 acres. These figures, however, do not represent the land actually held by the grantees, who have in many instances more land than they have any title to hold. The present income from quit-rents is £574, of which £461, 10s. od. is received by the municipality, and £112, 10s. od. credited to provincial reserves.

'There has been a space of ground reserved for the Dárjíling *bázár*, which is now under the management of the municipality. There are also some Government reserves at Karsiáng and Pankhabárí; but all the land intended for a *bázár* at Karsiáng, together with all the *maháldarí* lands, have been alienated by successive Superintendents and Deputy-Commissioners. The area of the Dárjíling *bázár* is 42 acres. The municipality has the management of it, and has expended large sums on buildings, from which a great part of its revenue is derived. Besides the *bázár* land, 47 acres have been reserved for native settlers, the rents of which are also received by the municipality.

'Lands for agricultural purposes were, under the rules, to have been leased in lots of not less than 10 acres, for a term of thirty years. If the land was uncleared it was to be held rent-free for five years, and to pay Rs. 2 or 4s. per acre for the rest of the term. It does not appear that a single grant of farming land was made under these rules, which were rescinded by the Government of Bengal in July 1851, when it was directed that, in future, such leases should be granted at rates to be fixed by the Board of Revenue. Between July 1851 and January 1869, several farming lots were granted for terms varying from ten to ninety-nine years, and at various rates. Some of these appear to have been afterwards commuted into fee-simple tenures; but I have not been able to trace these in all cases, owing to the extraordinary way in which commutations were effected. There are now in existence eleven rent-paying holdings granted under the orders of July 1851, with an area of 1550 acres, paying an annual rent of £82, 16s. od. Two of these, however,

although granted as if they were farming leases, were in reality building locations, which were for some reason taken up on a different tenure.

'It appears from a report of Dr. Campbell, Superintendent of Dárjíling, to the Board of Revenue, in August 1850, that previous to that year he had not found it practicable to take any revenue from the aboriginal inhabitants of the old Dárjíling territory. In 1850, however, he tried the experiment of settling defined tracts upon the head-men of the communities living within such tracts, for periods of three or five years; and he states in the letter above quoted that he had in this way settled the whole of the territory. In a subsequent letter, dated 24th December 1850, Dr. Campbell returned a list of these settlements, showing twelve leases, ten of which were for three, and two for five years. The total rent from all leases was returned at £16, 14s. 0d. No areas were given, but a schedule of boundaries was attached to each lease. In 1853 all these leases were renewed for five years. When they were first granted, there was no demand for land at Dárjíling, and the chief object was to attract native cultivators to settle under the lease-holders, who were bound not to take a higher rent than Rs. 2 (4s.) from each household of cultivators. But soon after the second leases were granted in 1853, more serious attempts than had previously been made were begun to introduce the cultivation of tea in these hills.

'Early in 1854, the Board of Revenue proposed to extend to Dárjíling the rules for leasing waste lands, now known as the Old Assam Rules. Dr. Campbell successfully opposed their introduction, chiefly on the ground that the public were satisfied with the existing rules. What the rules to which Dr. Campbell referred were is not clear, except probably a discretionary power which he had assumed of granting leases on such terms as he thought fit. I cannot give any particulars about these leases, as they seem to have been afterwards commuted, with many other tenures of different kinds, under the rules of 1859. Besides the leases so granted by Dr. Campbell, several of the leases to native *sardárs* which were granted in 1855 were purchased by Europeans. As these leases did not state the area of the land comprised in them, and were altogether of a most indefinite character, the purchasers really bought rather a kind of vantage-ground from which to attack Government for concessions, than any tangible property. In 1858, Major James granted several leases for periods of fifty years, for five

years of which the rent was to be a fixed sum irrespective of area, and for the remainder of the term at the rate of 8 *ánnás* (1s.) per acre. In the applications, these lands were described as required for farming purposes, but it was understood that they were intended for tea. The leases of 1853 expired in 1858, and much correspondence ensued with the Board of Revenue on the subject of their renewal. They, or some of them, were summarily renewed for 1859, and then nothing seems to have been done until 1860.

'Meanwhile a new set of rules for the grant of waste lands in the Dárjíling territory was issued on the 7th May 1859. Their most important provisions were, that grants of waste land should be put up to auction at an upset price of Rs. 10 (£1) per acre; that the sale at such auction should convey a freehold title; that existing leasehold grants might be commuted to freehold under the rules, at the option of the grantee; and that building locations might be commuted at the rate of twenty years' purchase of the annual rent. Between the introduction of these rules in 1859, and their abrogation on the introduction of the Fee-Simple Rules in 1862, 9172 acres of land were sold by public auction for sums aggregating £11,038, 12s. od., or at an average rate of about Rs. 12 (£1, 4s. od.) per acre. The provisions under which the lands were put up to auction were much disliked, and attempts were constantly made to evade them, some of which were successful. For instance, the Board of Revenue in August 1859, in answer to a reference made by the Superintendent, allowed the purchasers of the lessee's interest in one of the leases of 1855 to obtain a lease of the land for ninety-nine years at 8 *ánnás* an acre, commutable at any time for twenty years' purchase of the annual rent. The lease does not seem to have been ever issued, but a commutation deed was granted in July 1861, when no interest of any kind, so far as I can make out, existed in the lands. Upon this, the principle which it was assumed underlay the Board's order in the particular case mentioned was extended to other lands; and commutation deeds were given to people who had no claims beyond having purchased the interest of a former lessee in an indefinite lease, the term of which had expired.

'Besides the lands sold or commuted, as mentioned above, very large tracts still remained undisposed of in the hill territory; and Dr. Campbell, in 1860, proposed to make a settlement for 10 years with cultivators of the lands occupied by them in the hills, together with an area of jungle equal to twice the cultivation, at such rates

as seemed fair to him. Before he received orders on this subject, however, he reported to the Board that many of these cultivators had sold their rights, or supposed rights, to European speculators, and asked for instructions with reference to this point. At the same time, he forwarded a copy of a letter addressed by him to one of the largest purchasers of the cultivators' interests, warning him that the question of re-settlement was still under consideration. In another letter, Dr. Campbell proposed to give the cultivators compact blocks, including all the uncultivated land necessary to connect the scattered patches of cultivation of which many holdings consisted. He also proposed to make these tenures commutable to freehold at the rate of Rs. 10 (£1) per acre, and to leasehold for ninety-nine years at an annual rent of 8 *ánnás* (1s.) per acre. The Board of Revenue, in a letter, No. 33, dated 8th October 1860, sanctioned the proposition for the settlement of compact blocks, at such rates as the Superintendent might think fit. The Board refused to sanction the commutation proposal; and while approving of the warning addressed to the speculators, gave no definite orders on the subject of leases purchased by Europeans.

'In May 1861, Dr. Campbell reported that he had effected a settlement of some lands with native cultivators for ten years, at an average rate of 5 *ánnás* (7½d) an acre, subject to the sanction of the Board; and of some lands with "other persons" (*i.e.* Europeans) for ten years at 8 *ánnás* (1s.) an acre, with a promise that he would recommend the Board to allow the leases to be commuted at the rate of Rs. 10 (£1) an acre. The Board, in its letter, No. 37, of the 24th September 1861, approved of these settlements, but refused to allow commutation, on the ground that it would be allowing an evasion of the auction clause of Rule i. of 1859. Out of the tenures held under the leases granted in 1861, there are now only three rent-paying holdings within the old territory, the leases of which were renewed in 1872 for ten years at the rate of 8 *ánnás* an acre. These three tenures comprise an area of 972 acres, and pay a total rent of £48, 12s. od. The remainder were commuted after the introduction of the Fee-Simple Rules of 1862, under Government order, No. 3113, of 2d December 1872, which allowed commutation of all farming leases given previous to the introduction of the Fee-Simple Rules in August 1862. The area of the lands commuted under the orders of 1862 is 1342 acres, which, together with the area of the commutations under the rules of 1859, mentioned above, makes

a total of 21,287 acres in the old hill territory commuted to freehold without being put up to auction. The amount paid for the commutation of this area was £21,268, 18s. od., which is somewhat less than the amount which ought to have been paid according to the area stated above.

'In October 1861, Lord Canning's Resolution on the Sale of Waste Lands was promulgated, in which it was proposed to sell lands at Rs. 2. 8. 0 (5s.) or Rs. 5 (10s.) per acre, without auction, in ordinary cases. Many applications were made under this Resolution, and lands were actually granted in one instance. This was the well-known case of Rundle and Dear, in which the grant was afterwards disallowed. The Fee-Simple Rules for sale by auction were published by notification of the 30th August 1862. Under these rules, 24 holdings, with an area of 11,152 acres, were sold for an aggregate sum of £14,592, 16s. od., or about Rs. 13 (£1, 6s. od.) per acre.

'In 1864 a new tenure was introduced under Government order, No. 1765 T, of the 22d July of that year; by which lands were granted on cultivating leases for a term of thirty years at 6 *ánnás* (9d.) per acre, with a right of re-settlement at the end of the term at half the rates paid for land cultivated with the ordinary crops of the District. There were 22 holdings leased under these orders, with an area of 10,429 acres, of which the present rental is £431, 12s. od. These holdings are not commutable to fee-simple tenures.

'Besides the lands described in the foregoing paragraphs, there are considerable areas held by Government, as follows:—

'The cantonments of Jallápahár are supposed to cover an area of 225 acres. The Sinchál spur, which was made over to the military authorities in 1855 or 1856, is situated partly in the old, and partly in new territory; its area is estimated at about 300 acres. The ridge of the Dhobí Jhára hill above Karsiáng has been reserved for the purpose of building cantonments on it, if required; its area is 612 acres. The camping grounds at Básurhátí, Karsiáng, and Pachím have an area of 55½ acres; and there is a reserve of 74 acres at Pankhábárí, part of which is used by the commissariat. There is also a military reserve of 2 acres at Takdá.

'There are two grazing grounds retained within the limits of the municipality, with an area of 622 acres.

'The forest on the Gúm-pahár range, to the south-west of Dárjiling, has been always reserved for the supply of firewood, timber,

and bamboo leaves to the Station; it contains an area of 3679½ acres.

'Under orders of Government, No. 3901, dated 9th October 1866, a strip of land on either side of the cart road from the plains to Dárjíling has been reserved for purposes connected with the road. Its area is 571 acres, and a revenue of £36, 19s. 0d. is derived from persons allowed to occupy portions of it. The majority of these are tenants-at-will, but some hold leases. No further leases of this ground are now granted.

'A little more than 117 acres below Dárjíling was set apart for the jail. All unassessed forest lands above 6000 feet elevation, with the exception of the Gúm range, were made over to the Forest Department by a notification in the *Calcutta Gazette* of August 2d, 1865. By the same notification, certain lands on the Lebang spur were also declared to be reserved forest. All unassessed lands between the *tarái* and an elevation of 3000 feet were reserved for forest purposes. The total area of all the land reserved under the above notification is 14,455 acres. Besides the lands thus enumerated, the office records show 3511 acres in the possession of Government, a great part of which is occupied by cultivators who pay at the rate of Rs. 3 (6s.) per household, irrespective of the amount of land cultivated. I am anxious, if possible, to effect a land settlement with these people, giving them leases on rents calculated upon the area actually occupied by them, which should not be transferable without the consent of Government.

'The following is a synopsis of the various classes of land in the old hill territory, referred to in the foregoing paragraphs; and as far as I have as yet been able to find out from the papers in the office, it includes all the lands about the rights in which there is any record. Class I. Freehold tenures—Locations commuted into fee-simple under Rule x. of the Rules of 1859, 502 acres, 2 roods, 37 poles; lands bought under Rule i. of the Rules of 1862, 9172 acres, 2 roods, 15 poles; lands commuted under Rule ix. of the Rules of 1859, 19,945 acres, 3 roods, 12 poles; lands commuted under Government order of 2d December 1862, 1342 acres, 3 roods, 0 poles; lands bought under the Fee-Simple Rules of 1862, 1152 acres, 0 roods, 34 poles: total area of freehold tenures, 42,116 acres, 0 roods, 18 poles. Class II. Revenue-paying tenures—Locations under Rules of 1859, 837 acres, 0 roods, 13 poles; farming leases, 1557 acres, 3 roods, 1 pole; leases under Rules of 1864,

10,429 acres, 2 roods, 34 poles; ten years' leases, 971 acres, 2 roods, 24 poles: total area of revenue-paying tenures, 13,796 acres, 0 roods, 32 poles. Class III. Lands held by Government—Lands reserved wholly or partly for military purposes, 1268 acres, 2 roods; lands reserved for *bázárs*, etc., 112 acres, 1 rood, 8 poles; municipal grazing land, 622 acres; Gúm-pahár forest, 3679 acres, 2 roods; cart road reserve, 571 acres, 1 rood, 30 poles; jail reserve, 117 acres, 1 rood, 18 poles; lands held by Forest Department, 14,455 acres, 0 roods, 0 poles; lands for which no settlement has yet been made, but which are not reserved for any special purpose, 3511 acres: total of Government lands, 24,377 acres, 0 roods, 16 poles. Grand total, 80,249 acres, 1 rood, 26 poles.

'I cannot trace more than the above area of 80,249 acres in the office records, while the area of the old hill territory has hitherto been supposed to be 138 square miles, or 88,320 acres. I have come to the conclusion that the area of the old hill territory has been overstated, and that of the new territory understated. The total area of the British Sikkim hill territory, according to the Survey Records, is 476·72 square miles, or 305,100 acres. If Chebu Lámá's estate be deducted from this area, we get 230,540 acres for the remainder. Now, as will be shown in the following paragraphs, the aggregate area, according to the office records, of all classes of land (exclusive of Chebu Lámá's estate) in the new territory is 148,285 acres. Subtracting this from the total area of 230,540 acres, we find that the greatest possible area of the old territory is 82,255 acres. If, therefore, the office figures for the new territory are correct, the area of the old territory cannot be so great as it has been hitherto represented; but on the other hand, the missing area will turn out to be less than it appears at first sight. Even after allowance has been made for this, there will be 2006 acres unaccounted for, and it is not yet possible to say whether all of this area is in old hill territory, or some in the old and some in the new territory. It seems clear, as mentioned in a former paragraph, that some holders of locations are in possession of land in excess of what they are entitled to, or have paid for; and it is more than probable that holders of other tenures may also have excess lands in their occupation.

(2) 'HILL TRACT GRANTED TO CHEBU LAMA.—The lands granted to Chebu Lámá form part of the tracts annexed in 1850, and lie between the Nepál and Sikkim boundaries and the Little Ránjit river. After the annexation in 1850, Chebu Lámá obtained a lease of this

tract for three years at an annual rent of Rs. 20 (£2). No area was given, but the boundaries were stated, and a list was furnished of the villages situated in the tract, sixteen in number. This lease was renewed in 1853. The Lámá's position at that time was the same as that of the lessees in the old hill territory, and the lands came under the settlement of 1860-61, when a lease was granted to the Lámá for ten years at an annual rental of Rs. 1000 (£100). In this lease the boundaries were not specified, but the area was stated to be 4000 acres, and there was a provision that rent at the rate of 8 *ánnás* (1s.) an acre should be paid for any excess land found within the described boundaries. In 1862, Chebu Lámá asked, in consideration of his services, that the land held by him should be granted in fee-simple, or in perpetuity, at a nominal rent. Dr. Campbell, in forwarding the petition, recommended that it should be acceded to, and that the rent should be fixed at Rs. 500 (£50) a year. The Government assented to this, but desired that the rent to be paid after the death of the Lámá should be fixed, and inquired whether Rs. 1000 (£100) per annum would be a fair rate. In the meantime, Dr. Campbell had left, and his successor, Mr. Wake, pointed out that the land was believed to be really much more extensive than Dr. Campbell had thought, when he returned it at 4000 acres. The Bengal Government, however, in reply, stated that there was nothing to show that the amount at which it was proposed to assess the revenue of Chebu Lámá's lands after his death was unduly small, or that the margin left was more than a sufficient reward to the Lámá for his eminent services. Mr. Wake was also told that it should be explicitly explained to the Lámá that the lands held by him would belong to him and his heirs for ever, in proprietary right, subject to the payment of land revenue to the Government of Rs. 500 (£50) a year during the Lámá's lifetime, and of Rs. 1000 (£100) a year on his death.

'This letter seems to have been communicated to the Lámá, but no title-deed defining the land appears to have been given to him. He died in 1866, and his son and nephew were declared his heirs by Government, and allowed to hold the land at a rental of Rs. 500 (£50) a year, which was to be increased to Rs. 1000 (£100) on their death. This order was endorsed on the original ten years' lease of 1860. There is nothing to show directly what the holding actually is, but it has always been assumed that it is the tract contained within the boundaries described in the leases of 1850 and

1853. The area of this has turned out on survey to be 74,560 acres; but by far the greatest portion of it is almost worthless, consisting of barren mountains from 10,000 to 13,000 feet high. These afford some grazing for cattle, but not, I believe, to any extent. The most valuable portion of the tract was certainly held by Chebu Lámá when the grant was made to him by Government in 1862; and it could probably be proved that he had (so far as it is possible for any one to have) possession of the higher mountain tracts at that time. It is nearly certain that he used to get some grazing dues for the cattle sent to feed there during the summer months.

(3) 'THE REMAINING SIKKIM HILL TERRITORY.—A settlement of the remainder of the newly-acquired hill territory was effected after its annexation in 1850, as reported by Dr. Campbell to the Board of Revenue, in his letter, No. 534, of the 19th August 1850. The terms were identical with those on which the land on the old hill territory, and Chebu Lámá's land, were granted at the same time. The revenue payable under the leases, which were six in number, was Rs. 115 (£11, 10s. od.). These leases were renewed for five years, and again summarily for one year in 1859. No farming leases were given to Europeans previous to the introduction of the Waste Land Rules in 1859, and up to that time land does not seem to have been much sought after in the new territory, for I find that there was only one sale under Rule i. of 1859. The area of this lot was considerable, being over 4453 acres, and the price paid was Rs. 10 (£1) an acre. In 1860, however, there seems to have been more demand for land, as there were several leases granted at 8 *ánnás* an acre. Two of these holdings, with an area of 260 acres, are still rent-paying, under a new lease granted in 1872. Two others, with an area of 2996 acres, appear to have been commuted to fee-simple, on the strength of a letter, dated 2d July 1867, from the Government of Bengal to Mr. C. H. Barnes, of which no copy was kept among the Dárjíling office records. There is nothing whatever in the records to show the nature of this transaction, except that it appears that Mr. Barnes resigned much leasehold land at the time of getting this commutation, which, it is supposed, was granted in consideration of his surrendering the leases of the other lands. It is also conjectured that these latter lands were taken back from Mr. Barnes with the intention of using them for cinchona cultivation. They were not so used, however, and some of them were afterwards disposed of as waste lands. Besides these commu-

tations, four other holdings, with an area of 3827 acres, have been commuted under the orders of Government of December 1862.

'Seventeen lots, comprising an aggregate area of 22,613 acres, were sold under the Fee-Simple Rules of 1862 for £5670, 12s. od., or an average of about Rs. 2. 8. 0 (5s.) an acre. Seventeen leases, with a total area of 18,119 acres, were granted under the orders of 1864. The Forest Department holds an area of 37,269 acres, reserved under notifications, dated 2d August 1865 and 23d January 1866. The Cinchona Department has an area of 37,702 acres, reserved under orders of Government, dated 30th August 1862.

'The area of the Government land directly managed by me is nominally 22,891 acres, but out of this there are certain lands at Mím and Tamsáng actually in the possession of tea planters and under tea, for which settlements are to be made when the area has been ascertained. Probably the area of these lands will turn out to be about 1400 acres. Then there is the land of Ranglí Rangliot, a lease of which is to be given to Messrs. Graham and Judge. The area of this is not accurately known, but it is supposed to be about 800 acres. The area, therefore, of the Government land, directly managed by me, may be put down at rather more than 20,000 acres. Out of this area, one block called Sadyang Manguá was reserved under Government order, No. 4332, of the 8th November 1870, for a Lepchá settlement. Its area is 4087 acres. During the year 1873-74 there were upon it 110 families paying a revenue of £33, at the rate of Rs. 3 (6s.) for each family. I have been over the ground, and believe that a much greater revenue can be raised, and the number of cultivators increased. There are now (September 1874) 161 households on the ground, paying for this year £48, 6s. od. I hope next year to have 300 houses, yielding a revenue of about £150; for the people seem quite willing to pay an increased rental, if their tenures are made somewhat more secure. There are four plots of land, with an area of 2661 acres, which are returned as *khás* in my records, but which are said to be actually in the possession of the holders of adjoining grants, who collect revenue from the cultivators settled upon them. I am inquiring into this matter, but it cannot be satisfactorily settled without a survey of the lands, which is being made.

'There are four other tracts, with an area of 3358 acres, which, on account of their great elevation, or of the steepness of the ground, have not been cultivated, and no revenue has been derived from

them. There remain eleven tracts with an area of about 10,000 acres, which my predecessor considered to be available for disposal as waste lands, but which I have found to be occupied by cultivators, all of whom show perfect willingness to pay the Government demand. Most of these lands had been once disposed of as grants, and the cultivators then paid rent to the grantees. Afterwards, the grants, from various causes, reverted to Government, and measures do not always seem to have been taken to realize the dues payable by the cultivators. Indeed, in some instances, the revenue was formally remitted by my predecessor in recorded proceedings, which he seems afterwards to have overlooked, when he described such cultivators as people who had squatted on the lands without permission, and who paid no revenue to Government. The amount actually collected in 1872-73 was £33, 6s. 6d. The number of households at present settled on the lands is 240, and the revenue payable for the year is £72. If I could give the cultivators an assurance that the lands would not be granted away over their heads, I could greatly increase both the number of holdings and the revenue derived from them; but I do not feel justified in doing this, until I have completed the inquiries I am now making into the question of lands in the District, and have received the final orders of Government.

'The following is an abstract of the different classes of land in the new hill territory:—Ten years' leases, 260 acres; thirty years' leases, 18,119 acres, 1 rood, 7 poles; sales under old Rules, 2604 acres, 3 roods, 29 poles; sales under Rules of 1862, 22,613 acres, 0 roods, 18 poles; commutations under Rules of 1859, 2996 acres; commutations under Orders of 1862, 3827 acres, 3 roods; forest lands, 37,269 acres, 3 roods, 30 poles; cinchona lands, 37,702 acres, 2 roods, 2 poles; *khás* lands, 22,891 acres, 1 rood, 35 poles: total of new hill territory, 148,285 acres, 0 roods, 1 pole. Total of old hill territory, 80,249 acres, 1 rood, 26 poles. Total of Ghebu Lámá's land, 74,560 acres. Grand total, 303,094 acres, 1 rood, 27 poles. But, as stated in a preceding paragraph, the total surveyed area of the tract is 305,100 acres, consequently there remains a deficiency of 2006 acres to be accounted for.

(4) 'THE TARAI.—After the annexation of the *tarái* in 1850, it was at first decided by Government that the southern portion of the tract should be placed under the Purniah Collector, and the northern portion attached to Dárjíling. But, apparently in consequence of

the extreme dislike shown by the inhabitants of the southern *tarái* to the transfer to Purniah, the Government decided in the same year to attach the whole tract to Dárjíling. Before this was done, however, a settlement for three years of the land revenue had been effected by the Collector of Purniah with the Rájbansí and Musalmán inhabitants of the lower *tarái*. Meanwhile Dr. Campbell had made a settlement for three years of the upper *tarái*, which at the time seems to have been chiefly inhabited by Mechs. Previous to the annexation, the revenue of the *tarái* was derived from the following sources:—(1) From a *dáo* or hoe tax paid by the Mechs and Dhimáls; (2) from lands settled with the Bengalí inhabitants of the lower *tarái*; (3) from dues paid for cattle sent from the adjoining Districts of Bengal to graze during the early months of the year; (4) from forest produce; (5) from excise or spirits; (6) from market dues; (7) from fines; (8) from a tax on musicians.

'The revenue raised from the first two at least of these sources was collected by Bengalí officers called *chaudharís*, who also exercised certain civil and criminal powers. They were apparently in all cases *jotdárs*, probably each *chaudharí* was the chief landholder in his own jurisdiction. Each *chaudharí* received Rs. 45 (£4, 10s. od.) yearly as fixed pay, besides a *dastur* or customary fee of Rs. 2 (4s.) for each house in his jurisdiction, and also certain fees and fines. They also seem to have got 4 *ánnás* (6d.) out of each rupee (2s.) paid by the Mechs and Dhimáls as hoe tax. There appear to have been eight of these *chaudharís* at the time of the annexation.

'The number of *jots*, the revenue of which was collected by these *chaudharís*, was 544, and the gross revenue was £1950, 14s. od. According to tables submitted to the Board of Revenue, the cost of collection seems to have been £187, 14s. od., leaving a net revenue of £1763; but Dr. Campbell implies in one of his letters that the cost of collection was really far more, and the net proceeds less than these amounts. The holdings of *jotdárs* were renewed from year to year; but Dr. Campbell considered that they were practically hereditary owners of the land, and that each year when they went to the *chaudharís* to have the registration of their holdings renewed, they claimed a right which the *chaudharí* could not refuse. Dr. Campbell acted upon this theory in his settlement, and so apparently did the Collector of Purniah. The *chaudharís* were retained with some alteration in their profits, which by order of the

Board of Revenue were to be 10 per cent. upon the collections, but they were deprived of all civil and criminal powers. The *jotdárs* got three years' lease of their holdings, with a clause which was meant to imply a promise of renewal. The gross amount of the new assessment (*jamá*) was £2047, 18s. od., and the cost of collection £262, 14s. od.—considerably more than the rate of 10 per cent. sanctioned by the Board of Revenue. Besides these rent-paying leases, Dr. Campbell granted *pál* or rent-free leases for uncleared jungle, for terms of five years, with a promise of settlement of all the cultivated land within the tenure for an equitable rent at the expiration of the rent-free term.

'In 1853, the cultivated portions of the *tarái* were re-settled for ten years. The re-settlement was made exclusively with the *jotdárs:* 595 *jots* were assessed, and the *jamá* on them was fixed at £3073, being 36 per cent. more than the previous *jamá*. The lands were not measured for the assessment of this *jamá*, but each *jot* was assessed roughly, on a comparison made between it and certain standard *jots* in the same *mauzá* which had been previously carefully surveyed and examined. The system of collection through *chaudharís* was still maintained. The Superintendent still continued to grant *pál pattás* (leases) for jungle land, to be held rent-free for five years, and granted 21 such during 1853. He also mentions in his annual report for that year that he had made settlements for ten years of seven holdings, the leases of which had expired during the year, for amounts aggregating £14, 18s. od. Fresh *pál jots* were granted from time to time until 1861, when the system ceased under orders of Government. The total number granted up to that time was 220. Between 1853 and the end of the term of settlement in 1863, 207 new rent-paying *jots* were created, most of which appear to have been expired *pál* holdings.

'In April 1863, 660 *tarái* holdings, of which 558 were rent-paying, expired; and as it was decided that the new settlement should be based on a survey, they were renewed summarily from year to year until 1867, when there was a general re-settlement of these *jots*, as well as of some others, the term of which had in the meantime expired. This settlement seems to have been based on the survey which had just taken place. The number of *jots* settled is stated to be 739, and the rents to vary from 12 *ánnás* (1s. 6d.) per acre for low paddy land, to 1 *ánná* (1½d.) per acre for grazing land. The increase of revenue was put at £1658, 6s. od., but nothing said

about the cost of collection. This omission may have been owing to the fact that the system of collection through the *chaudharís* had been abolished in 1864, and that the collections were thenceforth made through a new Sub-divisional establishment, with its headquarters at Hánskawár in the *tarái*. It appears from the office records that the area of the *jots* settled in 1867 was 115,137 acres, and that the revenue derived from them was £3504, 2s. 9d.

'Besides these 739 ten-year *jots* of 1867, there were 61 *jots* with an area of 8016 acres settled for ten years between 1858 and 1867, the terms of which had not expired at the time of re-settlement. Twenty-four of these leases, with an area of 2729 acres, expired in 1868, and were renewed for ten years on what appears to be the very inadequate *jamá* of £57, 3s. 10d., which was the amount paid under the expired leases; 25 others, with an area of 2712 acres, were in a like manner renewed between 1869 and 1871 at the rates which were previously paid, and yield a revenue of £103, 5s. 0d; 12 more, with an area of 2575 acres, expired in 1872, and these were summarily renewed for one year at the old revenue of £86, 18s. 6d. I have not again renewed the leases, and shall refer the matter for the orders of the Board of Revenue.

'The settlement of 1867 was based on a survey of the *tarái* made between 1863 and 1865; and according to theory, the renewed lease of each *jot* conveyed to the lessee the area to which he was actually entitled under the previous lease, which had expired in 1863. But there is absolutely nothing in the office records to show how the holdings were defined for the purpose of survey. I have been told that the holders pointed out their boundaries, and that these were accepted as correct. Besides the revenue-paying holdings surveyed in this way, there were *pál* or rent-free holdings. The leases of these holdings gave a right to cultivate 200 *bighás* (about 66 acres) within a certain indefinite larger area, and in this respect resembled the well-known *júm maháls* of Sylhet. When the survey was made, the holders of *pál* leases were, according to my information, told to point out the limits of their gross holdings. In almost all, if not in every case, it turned out that the area within such limits was much greater than the 200 *bighás* of the lease, and the lessee was told to point out in what portion of the surveyed area he would take his 200 *bighás*. On his doing so, that area was surveyed off, and the remainder of the holding was returned as excess. The total

area so shown was 14,405 acres, much of which was in scattered plots in all parts of the *tarái.*

'Besides this, there was an area of 14,228 acres, which seems to have been taken up for the Forest Department and relinquished by it at the time of survey. These lands are called in the office records 'forest excess' lands. These, as well as the '*jot* excess' lands, have all been settled on thirty years' leases, under the orders of July 1864, with 33 grantees, one of whom received 14,330 acres under the special orders of Government in April 1867.

'There are 175 acres in the *tarái* reserved for *bázárs*, camping grounds, etc.; and the office records show 9543 acres as reserved forest. But I find in the report of the Conservator of Forests for 1872-73, that he states the area of reserved forest in the plains to be 30·7 square miles, equal to 19,648 acres. On the other hand, he gives the hill forest area as 74·6 square miles or 47,744 acres, while the Dárjíling records show an area of 51,724 acres. The total area held by the Forest Department, as returned by the Conservator of Forests, is 105·3 square miles or 67,292 acres; while the District records show only 61,267 acres as reserved forest.

'The *tarái* areas, according to the District records, are as follow:—Lands held on leases for ten years (including 12 leases which have expired and which have to be renewed), 806 holdings, comprising an area of 124,236 acres; lands held on thirty years' leases, 28,633 acres; *bázár* lands, etc., 175 acres; forest lands, 9543 acres: total, 162,587 acres. According to the survey, however, the area of the *tarái* is 173,747 acres, and there are consequently 11,160 acres to be accounted for. If the statement of the Conservator of Forests as to the quantity of land held by the Forest Department be correct, the greater part of the missing lands must be in its possession. On the other hand, it seems clear, from a comparison of the holdings of the *jotdárs* as surveyed with the areas as stated in their leases, that many hold much more land than they are entitled to. We have not yet been able to find out the total area so held in excess of the acreage given in the leases, but in the *mauzás* as yet examined it has been considerable.

(5) 'THE BHUTAN HILL TRACT.—At the conclusion of the war with Bhután in 1864, the hilly tract to the east of the Tístá, which formed part of the annexed territory, was formed into a Sub-division called Dálingkot, and placed under the Deputy-Commissioner of the Western Dwárs. It was, however, transferred to Dárjíling District

in October 1866. This Sub-division has apparently never been formally abolished, but there has been no establishment maintained since 1869. When first annexed, the population consisted almost entirely of Bhutiás, who paid a poll tax in lieu of land revenue. The amount of this tax in 1865 was £64, which sum was collected by 19 *mandals* or village head-men, who seem to have held a similar post under the Bhután Government. In 1872-73 the number of *mandals* had increased to 26, who collected from 852 households a revenue of £221, 5s. 6d. The population has very much increased during the past year (1873-74), and consequently the collections from poll tax ought to have increased in proportion. But a custom has been allowed to grow up, under which settlers are not taxed for the first year; consequently, the increase in the demand for the past year was only about £60. I expect the collections for this year (1874–75) will be very much larger than those of any previous years. But I am anxious to substitute an assessment on the land for a capitation tax, and I think the time has now come for making the change. Very much of the land has been brought under cultivation, and the use of the plough is not uncommon where the situation allows of it. The homesteads are substantial and comfortable looking, and in many other respects there are indications that the people are advancing beyond that semi-nomadic state which made a capitation tax the only practicable means of getting any revenue from them.

'But while I am anxious to make a settlement with the cultivators for the lands held by them, I am quite certain that any such settlement made without careful preliminary inquiry, and some kind of survey and demarcation, would be a very mischievous thing. There has been a topographical survey of the tract, but no attempt was then made to show the area of the cultivated holdings, or even their situation, except in a very few instances. In some parts these holdings are situated close together, and nearly unbroken sheets of cultivation and clearances stretch for miles along the crests and sides of the hills; but many holdings are surrounded by jungle. There is much forest of value, and some land which might be made available for tea cultivation. But the forest cannot be reserved, nor lands granted for tea planting, with safety, until the existing cultivating holdings have been properly defined and marked off on the maps. After this has been done for the existing holdings, we shall be in a position to define the lands to be reserved for forest

purposes, and to decide what should be made available for tea. But if the actual extent and boundaries of the cultivating holdings are left undefined, while a title of some kind is given to the cultivators, the same difficulty and confusion which we have had to deal with on the west of the Tístá would certainly make their appearance in the course of time.

'Besides this, there is a struggle going on between the Bhutiás and Nepálís in the tract, which will require very careful attention when a settlement is being made. The Bhutiás and Lepchás, who were the early inhabitants of the tract, resent what they think the intrusion of the Nepálís, who have for some time been settling in great numbers; and unless care is taken, the latter, who are much the stronger race, will drive the former out. At the same time, it is most undesirable that any precautions, taken for the protection of the Bhutiás and Lepchás, should have the effect of discouraging the colonization of the country by Nepálís.'

RATES OF RENT.—Land is nowhere measured by the *bighá* in Dárjíling District. In the *tarái*, land is let out to cultivators by the *hál*, which properly means the quantity of land which can be brought under cultivation with one plough; but as so much depends upon the ploughman and the capabilities of his bullocks, the term has a very comprehensive meaning. The Deputy-Commissioner, in a report to Government on the prevailing rates of rent paid for the ordinary descriptions of land, dated 10th August 1872, states that as a matter of fact a *hál* may mean anything between 5 or 6 and 20 *bighás*, or between 2 and $6\frac{2}{3}$ acres. With the exception of *pán* cultivation, which is confined to the neighbourhood of Phánsidevá in the extreme south-east of the *tarái*, the rates paid by cultivators do not as a rule depend upon the crops raised, but upon the description of land included in the *hál*. The land most in demand in the *tarái*, which therefore bears the highest rent, is low-lying land with facilities for irrigation. In some parts, a *hál* of land is charged at the same rate whether it includes low or high land; but as a rule, it may be laid down that the rent of a *hál* will be high or low, according to whether or not it comprises easily irrigated low land. Although rents are not paid according to the *bighá*, the Deputy-Commissioner, in his report to Government above quoted, stated that, after carefully considering all the information he had received on the subject, he had come to the conclusion that a cultivator in the *tarái* might be held to pay at the following rates for

each standard *bighá* of his *hál*:—'Land with good facilities for irrigation, R. 1 per *bighá*, equal to 6s. an acre; land with inferior facilities for irrigation, 8 *ánnás* per *bighá*, equal to 3s. an acre; high land of good quality, 8 *ánnás* per *bighá*, equal to 3s. an acre; high land of inferior quality, 4 *ánnás* per *bighá*, or 1s. 6d. an acre. These are ordinary rates, and they include ordinary homestead. There are, of course, exceptions. For instance, *pán* plots are charged at a fancy price, the cultivation being extremely remunerative. Homesteads near a centre of population or large market are assessed at a higher rate; and rice lands at Garídhará, near the hills on the main road to Dárjíling, and extensive plantations near the foot of the hills, are charged in some instances at rates which are equivalent to from Rs. 2 to Rs. 3 per standard *bighá*, equal to from 12s. to 18s. an acre.'

With regard to the rates paid in the Hills Sub-division, the Deputy-Commissioner states as follows:—'Cultivators in the hills to the west of the Tístá river as a rule pay by the house, and not by either the *bighá* or the *hál*. There are only two exceptions to this. One is in the case of cardamoms. These are assessed with reference to the extent of cultivation, at from Rs. 12 (£1, 4s. 0d.) to Rs. 28 (£2, 16s. 0d.) each field per annum. In some places, *e.g.* on the land held by the family of the late Chebu Lámá, no special rate is charged for cardamom cultivation; it is included in the tax levied on the house. The other exception is that one English landholder levies a rent on the out-turn of the crop. The rate of assessment per house differs throughout the District, but I believe the difference to be more apparent than real. That is to say, an English landholder, who is not anxious to secure labour for the cultivation of tea, will charge his cultivators as high as Rs. 12 (£1, 4s. 0d.) per annum for a well-fitted house. A native landholder will charge much less, but he looks to receive help *gratis* from his cultivator, when he requires it; for which the English landholder would have no occasion to ask, or for which, if he had such occasion, he would have to pay. To show how the rates differ, I may state that the Forest Department charge 8 *ánnás* (1s.) a month for each house; from 1 to 4 *ánnás* (1½d. to 6d.) for a cow or a bullock; and from 1½ to 6 *ánnás* (2¼d. to 9d.) for each buffalo. The family of the late Chebu Lámá, on their lands, make their charge with reference to the number of able-bodied men in a house, the number of cattle, and the extent of cultivation; the lump demand varies from R. 1 to Rs. 10

(2s. to £1) per annum. The annual charge on Government *khás* lands is Rs. 3 (6s.) per annum for each house, and 6 *ánnás* (9d.) per bullock. The average rent paid by a household, comprising three or four adult male cultivators, may be put down at Rs. 5 (10s.) per annum for the house, and 12 *ánnás* (1s. 6d.) per annum for each head of cattle. On the east side of the Tístá, in the newly acquired tract of Dálingkot or Damsáng, the cultivators pay a poll tax, viz. every able-bodied man, Rs. 2. 8. 0 (5s.) per annum; every woman, Rs. 2 (4s.) per annum; every head of cattle, 6 *ánnás* (9d.) per annum.'

MANURE, IRRIGATION, ETC.—Manure is only applied by the cultivators in the *tarái* for the cultivation of mustard, tobacco, and fibre. Cow and buffalo dung and household ashes are used; the quantity placed on the fields is only regulated by the extent to which it is procurable. In the hills, manure is not generally used at all.

Irrigation is very common in the *tarái*, the slope of the land and the numerous small streams and water-courses offering great facilities for such a utilization of the water supply. These are taken advantage of by the energetic habits of the cultivators, mostly Rájbansís, Muhammadans, and Mechs, who expend much time and money in excavating artificial canals to lead the water on to their fields. Irrigation in the *tarái* is mostly used for the rice crops, but the Deputy-Commissioner is unable to give any information as to its cost. In the Hills Sub-division, irrigation is also resorted to for rice cultivation in the lower valleys, chiefly by Nepálís. It is also used for the cardamom crops, which are planted in small patches. The cost of irrigation here is trifling, as it is only practised when the vicinity of a hill stream renders it easy.

It is not customary to let low lands in the *tarái* remain fallow, but high lands are occasionally allowed a rest. In the hills, land is practically left fallow. That is to say, a wandering cultivator after tilling a plot of land for two or three years, till the soil begins to show signs of exhaustion, will abandon it. Jungle soon springs up on the deserted field, the rotting leaves from which enrich the soil; and after a rest of a few years, the cultivator returns to take up the holding again, that is, if no one has anticipated him.

NATURAL CALAMITIES.—Two kinds of blight are known in the *tarái*. One is called *hatiná*; it affects the rice crops, and is said to be caused by excessive rains as well as by excessive westerly winds. In years of scanty rainfall another description of blight occurs,

known as *maghá*. Locusts also occasionally visit the *tarái*, and waste the cold-weather crops. Such calamities, however, are not wide-spread, and even in places were they do appear, they seldom cause any serious destruction of the crops. No remedial measures are adopted against blight. In the hills, natural calamities of any kind on such a scale as to seriously affect the general harvest are unknown. Partial blights occur occasionally in the tea gardens, caused by want of sufficient rain, or the late setting in of the rains; and in the rice cultivation, caused by locusts and by a bug known as *paterá*. The Deputy-Commissioner in 1871 stated that such partial blights in the rice crop had occurred twice within the previous twenty years. No remedial measures were adopted. Dárjíling District is not subject to floods. In the *tarái* one or two of the rivers occasionally desert their proper channels and take another course, doing considerable damage. The District is likewise free from drought, and no demand exists for irrigating canals, other than those constructed by the cultivators themselves, who are perfectly able and willing to do all that is required in this respect.

FAMINES AND FAMINE WARNINGS.—The maximum price of rice in Dárjíling District during the Bengal famine of 1866, as returned to me by the Deputy-Commissioner, in a report dated April 1871, was 5 *sers* for the rupee, or Rs. 8 per *maund* (equal to £1, 2s. 0d. per hundredweight) for the dearest sort of table rice; and to 8 *sers* per rupee, or Rs. 5 per *maund* (equal to 13s. 8d. per hundredweight) for the cheapest sort. These high rates were not due to scarcity within the District, but were mainly owing to the demand from other parts, and the consequent exportation of grain. At the time of the Deputy-Commissioner's report in 1871, prices were said to have reverted to their ordinary rates.

In the Hills Subdivision, with its scanty population, the means of earning a good livelihood are so easy, that the Deputy-Commissioner states that it is difficult to conceive the possibility of famine in this [illegible]. There could be no danger, so long as there was no famine in the *tarái* or the Districts to the south; but if prices rose steadily so as to reach 8 *sers* of Indian corn or rice for the rupee, or Rs. 5 a *maund* (equal to 13s. 8d. a hundredweight), the Deputy-Commissioner states that he would send notice of the rise in prices to Sikkim, Nepál, and to the Districts on the plains, and also make inquiries regarding edible jungle-vegetables and fruits. In reply to the Deputy-Commissioner's inquiries, several intelligent hill-men asserted that

if rice or Indian corn were selling at 5 *sers* for the rupee, or Rs. 8 a *maund* (equal to £1, 2s. a hundredweight), it would be considered a famine price; but the Deputy-Commissioner was of opinion that the hill population would have migrated to other localities long before prices reached this rate. One warning of famine in the hills would be the failure of the *bará áman* or winter rice crop, upon which, together with Indian corn and imported rice, the people chiefly depend.

In the *tarái* or lowland portion of the District, the Deputy-Commissioner reports that famine rates would be reached if paddy were selling at Rs. 3. 5. 0 a *maund* or 9s. a hundredweight. These prices would indicate a general failure of the crop throughout the *tarái*, as well as in the neighbouring Districts. Government would then have to interfere by importing rice, and also by employing the people on local relief works, such as roads, etc., to enable them to purchase grain. A failure of the lowland rice crop would be an indication of approaching famine. If the price of paddy ranged high in December and January, just after the harvesting of the winter rice crop, and showed signs of rapidly rising above Rs. 1. 5. 0 a *maund* or 3s. 7d. a hundredweight, the Deputy-Commissioner states that he would anticipate a famine later in the year. The Dárjíling *tarái* depends chiefly upon the lowland rice crop, and so long as this is good, or even yields an average crop, there is no fear of famine.

Writing in 1871, the Deputy-Commissioner expressed his opinion that the means of transit at the disposal of the District were not sufficient to avert a local famine by importations from outside, and stated that in the event of a general famine throughout Bengal, Dárjíling would suffer severely. The principal road is the one from Karágolá in Purniah to Dárjíling; and in 1871 this was reported as in an indifferent state, many of its most important bridges giving way every year in the rains. This road would not suffice for rapid importations. The hill people would be likely to suffer very much, as they would migrate to where they could obtain yams or other edible roots, if they could not get better food. But to save the *tarái* from danger of famine by opening up a means of communication, which would be available for importation in time of necessity, the Deputy-Commissioner reported that it must first be connected with the southern and metropolitan Districts by a railway. This work has now been undertaken; and the Northern Bengal State Railway, now (1876) rapidly approaching completion,

will connect Calcutta with Dárjíling, and thus enable any quantity of grain to be imported from the southern tracts in the event of a failure of the local crops.

FOREIGN AND ABSENTEE PROPRIETORS.—In 1871 there were in the *tarái* 14 European landholders registered as proprietors; and also 187 Musalmáns, whose share towards the Government revenue amounted to £787, 15s. 9d. There are no absentee landlords in the *tarái*. In the Hills Sub-division, 109 Europeans are registered as landholders; and also 9 Musalmáns, paying a land revenue of £16, 4s. The principal absentee proprietor (who, however, resides for a considerable portion of every year in the District) is the Mahárájá of Bardwán, who owns a considerable extent of freehold land in the hills.

ROADS AND MEANS OF COMMUNICATION.—The following is a list of the principal lines of road in Dárjíling District, as returned to me in 1871 by the Deputy-Commissioner:—Imperial roads under the management of the Public Works Department—(1) The Dárjíling hill cart road, which enters the District at Siliguri and extends to Dárjíling Station, a distance of 48 miles; the first 8 miles of the *tarái* section is metalled, the remainder unmetalled. (2) New cart road from the saddle to Jallápahár, 2½ miles; unmetalled. (3) From Panthábári to Siliguri, 16 miles; unmetalled. (4) Cinchona plantation road from the saddle to Rangbi, 7 miles; unmetalled. Total length of Public Works Department roads, 93 miles. Local Fund roads maintained under the supervision of the Deputy-Commissioner—(5) Road from the Little Ranjít river to Gok and Kalbang, 6 miles; unmetalled. (6) Road from Rangnu to Ranglí Ranglíot, 10 miles; unmetalled. (7) Road from Bálásan to Nágri, 4 miles; unmetalled. (8) Nepál road from the Little Ranjít river to the Nepál frontier, 20 miles; unmetalled. (9) Forest road from the Tístá river to Mann's Hut and Sivak, 12 miles; unmetalled. (10) Road from Takdá towards Rangli Ranglíot, 6 miles; unmetalled. (11) Road from the Great Ranjít to the Tístá bridge, 8 miles; unmetalled. (12) Road from the Tístá river to Kálíngpang, 6 miles; unmetalled. (13) Road from Kálíngpang to Damsáng, 14 miles; unmetalled. (14) Road from Damsáng to Llábá, 12 miles; unmetalled. (15) Road from Llábá to Dálingkot and Kiranti, 38 miles; unmetalled. (16) Road from Gáridhará to Nuksarbári, 12 miles; unmetalled. (17) Road from Gáridhará to Phánsidevá, 16 miles; unmetalled. (18) Road from Matigarh to Phánsidevá, 10 miles; unmetalled. (19) Road from Nuksarbári

to Karáibárí Hát, 6 miles; unmetalled. (20) Road from Karáibárí to Phánsidevá, 12 miles; unmetalled. (21) Road from Nuksarbárí to Matigarh, 12 miles. (22) Road from Karáibárí to Adhikárí Hát, 6 miles; unmetalled. (23) Road from Matigarh to Campásirí, 12 miles; unmetalled. (24) The Tístá road from Gurumárá to the Great Tístá, 12 miles; unmetalled. Total of Local Fund Roads, 234 miles more or less. Roads under the Municipality—(25) Dhutiriá road, running from the cart road to Dhutiriá factory, 8 miles; unmetalled. (26) Gok road from Dárjíling town to the Little Ranjít, 10 miles. (27) Hopetown road from the cart road to Hopetown and Bálásan, 16 miles; unmetalled (28) Road from Dárjíling Station to Jallápahár, 2 miles; unmetalled (29) Mineral Spring road, from Dárjíling Station to Rangnu, miles; unmetalled. (30) Road from Karsiáng to Pankhábárí, miles; unmetalled. (31) Ranjít road No. 1, from Dárjíling Station to the Great Ranjít, 12 miles; unmetalled. (32) Ranjít road No. 2, from Takvár to the Great Ranjít, 8 miles; unmetalled. (33) Singtám road from Dárjíling Station to the Little Ranjít, 10 miles; unmetalled. (34) Roads within the limits of the Station of Dárjíling, 20 miles; partly metalled and partly unmetalled. Total of roads under the Municipality, 100 miles more or less. Estimated total length of Imperial roads under the management of the Public Works Department, Local Funds roads under the Deputy-Commissioner, and of Municipal roads, 427 miles.

The cost of maintaining the District roads, other than those within the Station, is returned by the Deputy-Commissioner at from Rs. 25 to Rs. 30 (£2, 10s. 0d. to £3) a mile per annum. The Station roads, some twenty miles in length, cost a great deal more, probably not less than Rs. 150 (£15) a mile per annum. The reasons for this difference are, that the Station roads are broader and that some of them are metalled, that labour is dearer in the Station, and also that supervision has to be paid for. Outside the Station, in the Hills Sub-division of the District, the repairs of the roads are contracted for by the planters, who employ their own coolies, and take care that they give full labour for their pay. No large commercial centres or market villages have sprung up of late years along the lines of roads.

The Northern Bengal State Railway will have its northern terminus at Sukhná, at the foot of the hills. It will enter the District from Purniah at Siliguri, at which point it crosses the Mahánandá.

MINES AND QUARRIES.—The following account of the coal and other mineral deposits of Dárjíling, together with their economic aspects and probable future, is quoted from a valuable report on the 'Geology of Dárjíling and the Western Dwárs,' by Mr. F. R. Mallet (*Memoirs of the Geological Survey of India*, vol. xi. Part I., Calcutta 1874). A brief sketch of the geology of the District, from the same source, will be found *post*, pp. 201–204.

COAL.—'For many years the existence of coal has been rumoured from time to time in the outer range of the Sikkim Himálayas. Fragments of the mineral had frequently been observed in the hill streams, and its occurrence in larger quantities had also been reported. Amongst other places, the Sivak valley, close to the debouchuré of the Tístá, was mentioned, and so long ago as 1853 was brought to the notice of Dr. Oldham, the Geological Surveyor, by Dr. Campbell, then Superintendent of Dárjíling. Specimens of the coal were also sent to Mr. Piddington, Curator of the Calcutta Museum, whose analyses of them gave very favourable results. A brief examination of the Sivak and neighbouring streams, however, by Dr. Oldham, sufficed to prove that the coal was nothing more than the fossilized stems of individual trees, such as have been frequently observed elsewhere in the same tertiary rocks along the base of the Himálayas, and which are economically worthless.

'To Dr. Hooker we owe the first notice of the possible existence of the true Indian coal-measures in this region. In March 1849, when stopping at Pankhábárí on his way to Dárjíling, he observed in one of the streams there carbonaceous shales, with obscure impressions of fern leaves of Trizygia and Vertebraria: both fossils are characteristic of the Bardwán coal-fields, but too imperfect to justify any conclusion as to the relation between these formations. Ascending the stream, these shales are seen *in situ*, overlain by the metamorphic clay slate of the mountains, and dipping inward (northwards) like them. . . . The carbonaceous beds dip northwards 60° and 70°, and run east and west; much quartz rock is intercalated with them, and soft white and pink micaceous sandstones. The coal-seams are few in number, from 6 to 12 inches thick, very confused and distorted, and full of elliptic nodules, or spheroids of quartzy slate, covered with concentric scaly layers of coal: they overlie the sandstones mentioned above. These scanty notices of superposition, being collected in a country clothed with the densest tropical forest, where a geologist pursues his fatiguing investigations under disad-

vantages that can hardly be realized in England, will, I fear, long remain unconfirmed.

'The importance of the coal-supply for the great trunk railways of India has hitherto rendered the examination of the fields to the south of the Ganges more pressing from an economic point of view, than the exploration of an out-of-the-way corner of India like Dárjíling. The connection of Calcutta with the hills by means of the Northern Bengal State Railway has recently, however, given the question of the existence of coal in the Sikkim mountains a new importance. Copper mines have been worked for a long time past in the same region, but little has been known as to their value; and while lime has been in great demand of late for the railway works, the supply has been scanty and the cost extremely high. ° It having, therefore, been decided that an examination into the mineral resources of the Dárjíling District and of the Western Dwárs should be made, I was deputed to the duty at the commencement of last cold weather. My attention was of course mainly directed to such points as bear more directly on economic questions, and my observations on some other portions of the geology were necessarily rather scanty. The area which I examined most closely is a band a few miles wide along the foot of the hills, between the Mechí and Jáldhaká rivers; that in which the coal-bearing rocks occur.'

Mr. Mallet then proceeds to give an elaborate description of the geological formation of the District, as well as of the different localities in which out-crops of coal have been discovered and examined. This is, however, far too lengthy to be reproduced here; and for a detailed scientific account of the tract, the reader is referred to Mr. Mallet's Report. Passing from the more purely scientific aspects of the question, Mr. Mallet gives the following account of the value, etc. of the coal and other mineral productions of Dárjíling, from an economic point of view:—

List of Coal Out-crops.—'The following is a list of the coal out-crops as yet found in Dárjíling District, proceeding from east to west, excluding all those in which the thickness of coal is under two feet: —(1) Raktí *nadí* (*a*); thickness of coal at out-crop, 2 feet 6 inches; dip, 70°. (2) Raktí *nadí* (*b*); thickness of coal at out-crop, 5 feet 6 inches; dip, 70°. (3) Raktí *nadí* (*c*); visible thickness of coal at out-crop—part concealed—1 foot 4 inches; dip, 70°. (4) Chirankholá *nadí* (*a*); thickness of coal at out-crop, from 5 feet 4 inches to 7 feet; dip, 55°. (5) Chirankholá *nadí* (*b*); thickness of coal at out-

crop, from 2 feet to 8 feet. (6) Pathway south-east of Salím hill; thickness of coal at out-crop, 2 feet. (7) Cart road (*a*); thickness of coal at out-crop, 3 feet 6 inches; dip, 40°. (8) Cart road (*b*); thickness of coal at out-crop, 2 feet. (9) Cart road (*c*); thickness of coal at out-crop, from 1 foot to 3 feet 6 inches; dip, 30°. (10) Cart road (*d*); thickness of coal at out-crop, 3 feet 6 inches; dip, 45°. (11) Cart road (*e*); thickness of coal at out-crop, from 2 feet 6 inches to 3 feet 6 inches; dip, 45°. (12) Cart road (*f*); thickness of coal at out-crop, 6 feet; dip, 30°. (13) Cart road (*g*); thickness of coal at out-crop, 2 feet 6 inches; dip, 35°. (14) Tindháriá ravine (*a*); thickness of coal at out-crop, 11 feet; dip, 80°. (15) Tindháriá ravine (*b*); thickness of coal at out-crop, 6 feet. It is in the Tindháriá ravine that the finest coal seam yet found occurs. In the bed of the stream it has a thickness of 11 feet, with shale below it and sandstone above. This is one of the seams which I recommended for experimental trial by horizontal drifts. (16) Mahánandá river; visible thickness of coal at out-crop—part concealed—4 feet; dip, 70°. (17) Riyam *nadí*; thickness of coal at out-crop, 3 feet 6 inches; dip, 70°. (18) Rámtak *nadí* (*a*); thickness of coal at out-crop, 7 feet; dip, 20°. (19) Rámtak *nadí* (*b*); thickness of coal at out-crop, 2 feet; dip, 70°. (20) Ranjang *nadí*; thickness of coal at out-crop, 3 feet 6 inches; dip 15°.

'I speak of the above as out-crops, not as seams, because the vegetable mould and clay beneath the dense jungle render it impossible to trace the seams for any distance. They are seldom visible except in the very beds of the streams, nor can a seam be recognised in a second out-crop with any certainty, on account of its rapid variations in dip and strike, and still more in thickness. The sections are seldom sufficiently good to trace the seams by means of the associated beds. Thus, the same seams almost certainly out-crop more than once on the cart road, and the 6-feet Tindháriá seam may be the same as the 11-feet one. I have included all out-crops of 2 feet and upwards in the foregoing list, not on the supposition that a 2-feet seam of coal would pay to work, but because the seams vary greatly in thickness within a few yards. Thus, one of those in the Chirankholá is 8 feet on one side of the stream and only 2 feet on the other; and another on the cart road varies from 1 foot to 3 feet 6 inches in the short distance along which the out-crop is visible. A thickness of 2 feet at the out-crop may be the *minimum* thickness of the seam.

'There can be no question that these rapid variations are due, mainly or almost entirely, to the crushing which the rocks have undergone; but to some extent they may be caused by variations in the thickness of the bed, as it was originally formed. How much should be attributed to the latter cause is a most important element in the question of working the coal; and it was partly to gain information on this point that I recommended horizontal trial drifts to be driven into a couple of the more promising seams; namely, the 11-feet seam in the Tindhária ravine, and the 7-feet one in the Chirankholá. Mr. Tyndall, executive engineer of Dárjíling and Jalpáiguri, under whom the work was put, was unable to break ground at the latter during the rains. The drift into the Tindhária seam was driven 40 feet in from the out-crop at the commencement of the rains, and the seam was reduced to 6 feet. It is, however, very probable that it again increases in thickness farther in; and with a view to ascertaining the mean thickness of the bed here, and whether it maintains that thickness for some distance, or dies out partially or altogether, as well as to gain information as to the constancy or otherwise of the dip and strike, and whether the seam has been faulted or not, I recommended that the drift should be continued to a length of 300 or 400 feet into the hillside. Mr. Blanford states (*Memoirs of the Geological Survey*, vol. iii. p. 40) that in the Ránígánj field the coal of the Ráníganj group is more regular and of more even quality than that of the Barákhars, and the seams have a uniform thickness over considerable areas. If, then, as seems not improbable' [as explained in detail by Mr. Mallet in the more purely geological section of his Report], 'the Dárjíling beds represent the Ráníganj group, it may be inferred with some probability that the seams possess a considerable degree of persistency.

'With respect to the question of the amount of coal existent, there is a difficulty in determining the number of actual seams. The foregoing list of out-crops is not a long one, but the time at my disposal only allowed of my going up the principal river beds. An exhaustive search in all the smaller streams would doubtless increase it considerably. On the other hand, in some rivers, like the Tístá, where the rocks are fairly exposed, seams of a few inches thick are numerous, but not one of importance is visible.

'The crushing to which the coal has been subjected has induced a flaky structure, which renders it so friable that it can be crumbled into a flaky powder between the fingers with the greatest ease.

The coal was simply dug out of the Tindháriá drift with *kodáḷís;* a large proportion was extracted in powder, whilst what remained in lumps crumbled away on the application of the least violence; if handled roughly, or let fall a few inches, the lumps fell to pieces. The coal is not quite homogeneous in this respect; some samples from the Tindháriá drift were a little firmer than others, but the difference was trifling, and the coal 40 feet from the original outcrop was as soft and as flaky as at the surface. This proves beyond question, that the flakiness is due entirely to crushing, and not in any degree to surface weathering. Hence no material improvement in the firmness of the coal can be expected as the drift progresses; and there is reason to suppose that the seams everywhere will, like this one, prove as crumbly in the interior as at the surface.'

ANALYSIS.—'The following assays illustrate the composition of the coal, after being first dried at 212° Fahr.:—(1) Raktí *nadí*, 5 feet 6 inch seam—free carbon, 79·3; volatile matter, 7·6; ash, 13·1. (2) Cart road, 6-feet seam—free carbon, 74·1; volatile matter, 9·0; ash, 16·9. (3) Chirankholá *nadí*, 7-feet seam—free carbon, 69·6; volatile matter, 5·2; ash, 25·2. (4) Tindháriá ravine, 11-feet seam —free carbon, 66·3; volatile matter, 12·4; ash, 21·3. (5) Ravine south of Pankhábárí, 9-inch seam — free carbon, 64·0; volatile matter, 11·8; ash, 24·2. Average—free carbon, 70·66; volatile matter, 9·20; ash, 20·14. The samples were all taken at the outcrop, within a foot or two of the surface; but the coal seems to be little altered by exposure. The following assays are of samples taken at intervals of 10 feet in the Tindháriá drift. At surface—free carbon, 66·3; volatile matter, 12·4; ash, 21·3. At 10 feet from surface—free carbon 66·8; volatile matter, 11·4; ash, 21·8. At 20 feet from surface—free carbon, 67·5; volatile matter; 14·4; ash, 18·1. At 30 feet from surface—free carbon, 64·4; volatile matter, 10·4; ash, 25·2. The coal in many seams has a brilliant submetallic lustre; in others it is duller. The former variety is more friable than the other. The mineral is an "anthracitic coal," not a true anthracite, the volatile matter in which does not exceed 5 or 6 per cent.; that of the 11-feet Tindháriá seam, which contains 12 per cent. or so of volatile matter, cakes to a slight degree in the fire. A qualitative analysis of the ash of this coal proved the absence of both sulphur and phosphorus, a most important advantage in the manufacture of iron.

'Mr. Blandford gives assays of coal from seventeen of the

Ráníganj mines' [vol. iii. of the *Memoirs of the Geological Survey of India*, Part I. p. 189]. 'The mean of these shows an average composition of free carbon, 51·09; volatile matter, 32·64; ash, 16·27. If we assume, as we fairly may, that the Dárjíling coal, in its undisturbed state, had about the same composition as the Ráníganj, it follows that during the elevation and contortion of the former, the coal has lost, on an average, more than two-thirds of its volatile matter. The percentages of free carbon and ash are thereby of course increased.'

COMMERCIAL POSSIBILITIES.—'The question whether the Dárjíling coal can be profitably delivered at the terminus of the Northern State Railway, at Sukhná, may be discussed under three heads, viz.: (1) mining; (2) conveyance of coal to the foot of the hills; and (3) its conversion into a usable form of fuel.

(1) '*Mining.*—The high inclination of most of the seams, as well as the softness of the coal, would necessitate a method of mining altogether different from that pursued in the Ráníganj collieries, where the greatest dip of the worked seams does not, as I am informed, exceed 10° or 12°. Coal-mining in highly inclined strata is always more difficult than in horizontal ones; but in many European fields, such as those of Belgium, Westphalia, and some of those in England, fuel is profitably extracted from highly contorted seams. Where the folds of the strata are on a sufficiently large scale, so that the dip is tolerably constant for some distance, the coal can be worked at any inclination. But when, in addition to such larger curves, the seams are further crumpled up by other contortions on a minor scale, the difficulties are vastly increased, and may become so great as to render the coal valueless. Now, in the previous part of this Report' [not quoted here], 'I have noticed several instances in which the Dárjíling seams are affected in this way, or where they are crushed into small and violent contortions, and even doubled back sharply on themselves. This is decidedly the most unfavourable feature present. The coal in many places will be unworkable in consequence, and it is even possible that this condition may be so prevalent as to prevent any portion being worked at a profit. The rapid variations in the thicknesses of the seams, a consequence of the same crushing, is another element to be taken into consideration, although of much less importance than the contortions. The crushing has, further, more or less shattered the sandstone and shale beds, or their equivalents where metamor-

phosed, so that these rocks cannot be expected to furnish as firm a roof as the same strata where undisturbed. The existence of faults and of minor slips is also to be expected; and if of frequent occurrence, these would add another grave difficulty in working the coal.

'In the more highly inclined seams, the coal itself would form the roof of the galleries, and as it is far too soft to be self-supporting, there would be a heavy item of expense for timbering: an item which does not exist in the Ránígánj mines, worked on the post and stall system, where the roof is of sandstone or shale, supported on stout pillars of coal. It is also to be remembered that the farther a level is driven into the hillside, the greater will be the depth of superincumbent rock, and consequently the greater expense for stronger timbering to withstand the increased pressure.

'On the other hand, should the above difficulties not prove insurmountable, the coal could be mined, for a considerable time at least, by levels driven into the hillsides from the out-crops of the seams. The advantages of this would be important. The preliminary cost of shaft-sinking through unproductive rock would be saved, and also the expense of winding gear to raise the coal, including the capital sunk in machinery, and the consumption of coal for winding-engines, such as are necessary in mines worked by shafts. The coal need merely be run out to the surface, on tramways laid along the main levels. Further, pumping machinery and engine power, therefore, which form an important item of expense in shaft mines, would not be required, as the mines would drain themselves. The soft, friable state of the coal and the high dips would lead one to expect a considerable percolation of water from the surface. The Tindháriá drift, however, was quite dry in the interior, although a rivulet was trickling down the hillside directly above it. The surface clay no doubt protects the out-crop, and it would probably do so in many other cases also. In a thoroughly wet mine, it is to be feared that the water would render the already soft coal so yielding, that the difficulty of keeping up the roof would be considerably increased. The softness of the coal, although so disadvantageous in other respects, has at least this in its favour, that the work of "getting" the coal would be easier. Instead of the laborious "holing under" and subsequent breaking down by wedges or blasting that is employed in most mines, nothing is requisite but to dig the coal out with *kodálís* and picks, as was done in the Tindháriá drift.

'It may be confidently asserted that no risk is to be apprehended from fire-damp, within any distance from the surface that the mines are likely to attain. As such is practically unknown in the Dámodar coal of the Ráníganj mines, there is little to fear from the same coal after it has lost two-thirds or three-quarters of its volatile matter, from the disengagement of which the fire-damp originates. It is no doubt possible that some of this disengaged gas may still remain stored up at a considerable depth, but it is highly improbable, taking into account the disintegrated state of the coal, and the disturbed condition of the beds it occurs in. Another point in favour of the Dárjíling coal is the almost total absence of trappean intrusions, which do great injury to some seams south of the Ganges.

(2) '*Conveyance of the Coal to the foot of the hills.*—If the results of the trial drifts should prove sufficiently encouraging to warrant the attempt to work the coal on a commercial scale, the neighbourhood of Salím hill would be the most favourable place at which to begin operations. Out-crops of fair thickness occur more plentifully there; and the Chirankholá and Tindháriá seams, which are amongst the thickest as yet discovered, are close to the cart road, although several hundred feet below it. As a temporary measure, the coal could be brought up to the road on mules or cattle, along paths which would cost a very trifling sum, and then carted down to Sukhná. The distance along the road to the foot of the hills is eight miles, and the difference of level 1800 feet. The distance in a straight line is only three miles. If, subsequently, the out-turn should be sufficiently large, it would of course be necessary to make more complete arrangements.

'I observed no good seams near Ráni-hát, but a closer search might discover such. Their absence, indeed, would be another point against the coal, as showing that the seams near Salím hill are not continuous for two miles to the eastward. If found, the coal could be taken down the easy gradient of the diluvial Ráni valley, and thence across the *tarái* to Sukhná, a distance altogether of about 6 miles. To bring the coal away from the neighbourhood of the Mahánandá, it would be necessary to construct a road or tramway down the gorge of that river for about 3 miles measured along the bed of the stream, the distance from its debouchure to Sukhná being about 3 more. But this, of course, would not be undertaken until after mines had been opened near Salím hill, nor unless they turned out well.

(3) '*Conversion of the Coal into usable Fuel.* — The coal, as extracted from the mine, being in powder, or at best, in lumps which crumble into powder on the application of the least violence, manifestly cannot be used in its natural state. It must be artificially compacted before it can be utilized as fuel for locomotive purposes. Two ways of doing this present themselves, viz. coking, and conversion into patent fuel; and pending a more decided trial, which has been ordered by the Government of Bengal, I may here give the results of some experiments on a small scale which have been made.

'Of the coals of which an analysis is given on p. 133, the Tindháriá, which contains about 12 per cent. of volatile matter, and which cakes slightly in the open fire, yields a firm, hard coke when the powder is ignited in a covered crucible. Coal from the Raktí and Pankhábárí seams does not coke at all, although the assay of the latter agrees closely with that of the Tindháriá. Much of the Dárjíling coal is too near anthracite to give promise of being convertible into a good coke, and experiments seem to indicate that some of it will not coke at all.

'As artificial fuel the coal promises to turn out well. Mr. J. Grant of Barákhar, who has had the management of patent fuel works at Ráníganj, was kind enough to experiment on a few pounds of dust coal from the Raktí *nadí* 5 feet 6 inch seam. The ingredients used were in the following proportions:—Dust coal, 1 ton; starch, composed of from 12 to 16 lbs: of flour and from 30 to 35 gallons of water; crude carbolic acid, 1 pint. After being well mixed, the composition was pressed, by hand merely, into small cylindrical vessels, and the cakes subsequently allowed to dry. They were then almost as firm as average patent fuel; and Mr. Grant is of opinion, that, when pressed by machinery, the bricks could be turned out as hard as ordinary Indian coal in the block. A couple of the cakes were broken up and tried on a smith's hearth at the Calcutta Mint. The fuel burned clearly, with little flame, and afforded a strong welding heat. It stood the blast without crumbling and left but little clinker. It should be remarked, however, that the Raktí *nadí* coal has the best composition of any Dárjíling coal yet assayed. The amount of ash in Dárjíling coal is greater than that in Ráníganj, but the higher percentage of carbon fully compensates for this. The assays indicate that the heating power of average Dárjíling coal is above that of average Raníganj, and

nearly equal to that of the very best Ráníganj seams. The best Dárjíling is superior to the best Ráníganj.

'Mr. Grant estimates the approximate cost per ton of making the coal into artificial fuel as follows:—Disintegrating the "smalls" with Parr's patent machine, about 2 *ánnás* (3d.); rice-flour, 8 *ánnás* (1s.); crude carbolic acid, 4 *annás* (6d.); moulding, 2 *ánnás* (3d.); drying, 1 *ánná* (1½d.); and engine power, 1 *ánná* (1½d.). Total, about Rs. 1. 2. 0 (2s. 3d.) per ton. The first item would not be necessary in the case of most of the Dárjíling coal, as it is already in a sufficiently disintegrated state. Ample water power could be supplied at Sukhná by an aqueduct from the Mahánandá, thereby saving the consumption of coal for engine power. The cost of manufacture may therefore be set down at R. 1 (2s.) per ton, or perhaps rather less. This is exclusive of the cost of machinery and plant, which Mr. Grant estimates at about £900 for a daily out-turn of about 50 tons.

'Relative Cost of Raniganj and Darjiling Coal.—The question of the profitable workability of the Dárjíling coal depends, of course, on whether it can be delivered for use at Sukhná, and along the northern part of the railway, as cheaply as Ráníganj coal; in other words, whether the expenses of mining the highly inclined and much contorted Dárjíling seams, carrying the coal to Sukhná, and converting it into usable fuel, will not exceed the cost of the easily mined Ráníganj coal *plus* carriage to the same place. The Agent of the Eastern Bengal Railway Company furnishes the following estimate of the cost of Ráníganj coal delivered at Sukhná, *via* the East Indian and Eastern Bengal Railways:—Cost per ton of Ráníganj coal delivered at Sámnagar, on the Eastern Bengal Railway, Rs. 7. 12 (15s. 6d.); loading at Sámnagar 4 *ánnás* (6d.); carriage to Kushtiá, Rs. 3. 8. 0 (7s.); unloading at Kushtiá, 4 *ánnás* (6d.); ferry across Ganges to southern terminus of Northern Bengal State Railway, 14 *ánnás* (1s. 9d.); carriage by Northern Bengal State Railway to Sukhná, 200 miles, (actual cost) Rs. 3 (6s.); total cost per ton at Sukhná, Rs. 15. 10 (£1, 11s. 3d.).

'This route includes carriage from Ráníganj to Baidyabátí (106 miles) by the East Indian Railway, transport across the Húglí to Sámnagar, carriage from Sámnagar to Kushtía (95 miles) by the Eastern Bengal Railway, and transport across and up the Ganges (about 20 miles), to the Northern Bengal State Railway terminus, or in all 201 miles of railway carriage and two ferries. The two main

alternative routes to the terminus of the State Railway in the Ganges are—1st, from Ráníganj to Rájmahál by rail (173 miles), and thence down the Ganges for about 130 miles; and 2d, from Giridhí (Karharbárí) to Monghyr by rail (137 miles), and thence down the Ganges for about 260 miles. Both these routes have the advantage of involving only one shipment into boats. The following are approximate estimates of the cost of transporting coal by them:—*Viâ* Rájmahál—cost of coal at Ráníganj per ton, Rs. 3. 8 (7s.); loading at Ráníganj, 4 *ánnás* (6d.); carriage by rail to Rájmahál, Rs. 6. 12 (13s. 6d.); shipping at Rájmahál, 4 *ánnás* (6d.); carriage by boat to southern terminus of the Northern Bengal State Railway, Rs. 1. 4 (2s. 6d.). Total cost of Ráníganj coal at southern terminus, Rs. 12 (£1, 4s. 0d.). Carriage by rail to Sukhná, Rs. 3 (6s.). Total cost per ton at Sukhná, Rs. 15 (£1, 10s. 0d.). *Viâ* Monghyr—cost of coal at Giridhí, Rs. 3. 8 (7s.); loading at Giridhí, 4 *ánnás* (6d.); carriage by rail to Monghyr, Rs. 5. 11 (11s. 4½d.); shipping at Monghyr, 4 *ánnás* (6d.); carriage by boat to southern terminus of Northern Bengal State Railway, Rs. 2. 8. 0 (5s.). Total cost per ton at southern terminus, Rs. 12. 3 (£1, 4s. 4½d.). Carriage by rail to Sukhná, Rs. 3 (6s.). Total cost per ton at Sukhná, Rs. 15. 3 (£1, 10s. 4½d.). Thus it appears that Ráníganj or Karharbárí coal cannot be delivered at Sukhná under about Rs. 15 (£1, 10s. 0d.) a ton. The actual cost of raising the coal at Ráníganj is, as I am informed, about Rs. 1. 4. 0 (2s. 6d.) on an average; or, including cost of management, rather less than Rs. 2 (4s.) per ton.

'The cost of carrying the Dárjíling coal to the foot of the hills by tramway would probably not exceed a few *ánnás* a ton. Allowing, however, Rs. 3 (6s.) for carriage in the first instance by carts, we have roughly—carriage to foot of hills, Rs. 3 (6s.) per ton; conversion into patent fuel, R. 1 (2s.): cost, exclusive of mining, at Sukhná, Rs. 4 (8s.). Carriage by rail to southern terminus of Northern Bengal State Railway, Rs. 3 (6s.). Total cost per ton of Dárjíling coal, exclusive of mining, at southern terminus, Rs. 7 (14s.), as compared with Rs. 15 (£1, 10s. 0d.) at Sukhná, and Rs. 12 (£1, 4s. 0d.) at the southern terminus, for Ráníganj coal. This leaves a margin of Rs. 11 (£1, 2s. 0d.) per ton in the former case, and Rs. 5 (10s.) in the latter, for the cost of mining the Dárjíling coal. If, therefore, the difficulties of mining could be overcome at upwards of double the expense of raising the Ráníganj coal, the Dárjíling coal would pay at the southern terminus; and it would pay at Sukhná,

if it could be brought to bank at over five times the expense of raising the Ráníganj coal. This is on the assumption that the coals are of equal heating power: as I have shown, the Dárjíling coal has some advantage in this respect. If we allow, say, 8 *ánnás* a ton for carrying the coal to Sukhná by tramway, the margin for mining will be still larger. Serious, therefore, as are the difficulties to be encountered,—difficulties which, it is not to be concealed, may prove insurmountable,—the Dárjíling seams are clearly well worth a fair trial, and I would decidedly recommend that the experimental drifts be carried on.'

'IRON.—There is a strong ferruginous band included in the tertiary sandstones of Lohárgarh. The out-crop runs along the southern brow of the hill, with a thickness near the centre of perhaps 40 yards. The length of the out-crop being about a mile from east to west, or between the points where the band disappears below the alluvium, there is clearly an almost unlimited supply of ore. It is, however, of poor quality, the better portions containing only about 30 per cent. of iron, as shown by the following assays of three samples:—No. 1, 30·8 per cent. of iron; No. 2, 28·7; and No. 3, 32·3. The ore varies from a strongly ferruginous clay to an impure brown hematite, and has frequently a pseudo-brecciated aspect. It is not smelted by the natives, although there are vague traditions of its having been once worked, and of hammers still to be seen on the hill, so heavy that no one can lift them! The Chengá *nadí* brings down lumps of ore, an assay of one of which gave 39·6 per cent. of iron; but the lumps which stand such water-transport are the tougher and purer, or less clayey portions. Taking into account the poorness of the ore, and the fact that there is no considerable supply of limestone within 60 miles (unless in the unexplored country of Nepál to the westward); and that the Dárjíling coal, if practically workable, will certainly be more expensive at the mines than Ráníganj coal at the pit's mouth; also that wood is already growing scarcer and dearer in the hills west of the Tístá, owing to the demand for tea-making; there is little reason to suppose that iron-works can ever be profitably established at Lohárgarh. In other parts of the country more centrally situated, cheap coal and good ore are found together.

'A valuable bed of iron ore was discovered a few years ago about a mile east-south-east of Síkbhár. It is two or three hundred feet above the bed of the Rer *nadí*, and some 3000 feet above the sea.

It has, as yet, only been worked at two spots, about 200 yards apart. The section at the eastern digging includes actinolite rock, with some quartz and talc-schist, containing octahedrons of magnetite; this is covered by the band of ore, which seems to be about 20 feet thick, but it is obscured a good deal by surface soil. Above it is more actinolite rock with crystals of magnetite, and then fine-grained gneiss dipping north-east at 30°. The magnetite of the main band occurs as an aggregation of irregular crystals about the size of peas. These cohere but slightly to each other, so that the rock is easily crumbled. In places the ore is pure magnetite, but more usually it includes a varying proportion of actinolite. At the other spot where the ore has been worked, it is a schist composed of magnetite, micaceous hematite, actinolite, and talc, irregularly interbanded; the last three also include octahedrons of magnetite. Specimens of both kinds of ore have been assayed with the following results:—Magnetite, 71·50 per cent.; and micaceous hematite, 59·89 per cent. of iron. Neither contain any phosphorus or sulphur.

'The ore has been smelted at Síkbhár, but to a very trifling extent. At the time of my visit there were only two furnaces, one of which was new. Neither was in blast at the time, but the method of smelting seems to be quite similar to that usually practised in Bengal. The micaceous hematite is not used, as it is said to yield a soft iron, unsuited to the manufacture of knives, etc.; and it also occurs in comparatively small quantities. The magnetite is well suited in its texture to native furnaces, from the ease with which it is crumbled down into convenient-sized grains. It is more difficult to smelt than the micaceous hematite; but the *kámís* (as the Nepálí workers in iron are called) assert that it yields a steely iron, particularly well suited for making *kukrís* and *báns* (large knives or bill-hooks), from its combination of hardness and toughness. The raw spongy iron is sold at Síkbhár at the rate of 6 *sers* per rupee. It is re-heated and hammered out by the *kámís* into small bars, which are doubled up and hammered out again. This operation is repeated two or three times before the iron is finally worked up into *kukrís*, etc., which are tempered by heating and plunging into water.

'The deposit is a valuable one. As will be seen from the assays, the ore is extremely rich, and the quantity appears to be considerable, while the iron produced is of the best quality. The out-turn might be largely increased, and a dozen or more native furnaces easily kept in blast. There is abundance of wood for such in the

Rer valley, the upper part of which is entirely covered by virgin forest. At some future time the locality may attract notice for the production of a high-class iron on a larger scale. The workability of the coal will greatly affect this question, but the want of flux within a moderate distance must always be a drawback to iron-smelting in the Dárjíling hills. The conditions are not such as would induce one to look to them during the infancy of iron-smelting on European principles in this country.

'The actinolite rock which accompanies the magnetite is a peculiar variety of rock, which I have not seen elsewhere *in situ.* Pieces of a similar stone are, however, brought down by the Rángnu, a stream which joins the Tístá south-west of Kálíngpang. The bed it comes from may be the same as that at Síkbhár, and a close search towards the head of the Rángnu might be rewarded by the discovery of accompanying magnetite. Blocks of magnetic iron schist are washed down by the Sakkam river south of Dálingkot. The rock is composed of magnetite and quartz, the grains of each being sometimes distinct, but more usually intimately blended, so that the rock becomes almost compact. The Má-chu brings down large lumps of micaceous hematite. The hills through which these streams flow are uninhabited and covered by dense forest.'

'COPPER.—THE METHOD OF COPPER-MINING adopted in Dárjíling is very similar to that generally pursued in India in most native mining operations. The mines greatly resemble magnified rabbit holes; meandering passages are excavated with little or no system; and although some precaution is taken to support the roof in the more shaky places by timber props, the number of fallen-in galleries show how inefficiently this is done. The passages average about a yard in height and width; but where the rock has not yielded a paying proportion of ore, they are contracted to a size barely sufficient to admit a man's body. Access to the interior of the mines, therefore, is gained by crawling on "all-fours," and in the narrowest parts by lying flat on the face and progressing after the manner of serpents. As a natural consequence of such a primitive system, the excavations cannot be carried on beyond a very trifling depth as compared with European mines; although, taking the actual risks incurred into account, and imaginary dangers, which the stillness and darkness within the bowels of the earth are not calculated to dispel from the mind of a simple, superstitious race, no little courage is shown by the miners in excavating as far as they often do.

'The tools generally used are an iron hammer and a round pointed chisel, which is held by a strip of split bamboo twisted round it. Small picks are also sometimes employed. The lights used are thin strips of dry bamboo, a bundle of which the miners take to work with them; they say that the smoke is less irritating to the eyes than that from other kinds of wood. They are, I believe, all Nepálís; the Lepchás never engage in such occupations.

'The ore, which is copper pyrites, is brought from the mines in small bamboo baskets of an elongated form, so as to be readily taken along the narrow passages. After a preliminary breaking up of the larger pieces and the rejection of the refuse, the picked ore is broken up small on flat stones, with hammers formed of pieces of quartzite or other hard rock, tied into forked sticks. Subsequently it is pounded to a coarse powder with heavier hammers of the same kind. The powder is washed in troughs, made of rough planks fixed on the ground. In form and size the troughs resemble small coffins, but the top and lower end are open. A small stream of water flows through, which is regulated in quantity by a dam of clay at the upper end. A hollow is made in the dam to allow a sufficient stream to flow into the trough, while the surplus water runs off by another channel. The ore is continually agitated by hand, or with a small basket-work shovel, and moved towards the upper end of the trough, by which means the larger fragments of copper pyrites, and of mundic, if the ore be contaminated with it, are collected there, and the lighter residue carried lower down. This residue, which still contains some ore, is ground in handmills similar to those used in India for grinding corn, with grinding surfaces formed of slabs of gneiss. It is then re-washed in the same way as before, and the same operations sometimes repeated on the residue. The ore from the different washings is mixed together, and is then ready for smelting. Most of the dressing operations are done by women.

'The smelting-furnace is generally built with some neatness, of refractory clay. In its ruder form it consists merely of a hole dug in the ground, with a low clay rim along the sides and front, and a higher one or a flat stone at the back; the inside is plastered with refractory clay, if that of the ground itself be not sufficiently infusible. The furnace is about 18 inches deep, a foot square at the top, and tapering a good deal towards the bottom. When it is dry, small charcoal is filled in to a depth of a foot, and beaten down with a wooden rammer till a saucer-shaped floor of coarsely powdered charcoal is

formed, sufficiently compact to prevent the products of the smelting sinking into it. This protects it from the blast, and it is besides too compact to burn easily. There is no orifice in the lower part of the furnace. Two clay tuyeres dip nearly vertically about 3 inches into it from the top, and are respectively connected with skin bellows by horizontal tubes about a yard long. The tubes are formed of clay mixed with chopped straw, and are moulded on a straight stick, which is subsequently withdrawn.

'The furnace, thus prepared, is lighted up with charcoal, and the bellows at each side worked alternately. When at its full heat, the powdered ore is sprinkled in at short intervals, until a sufficient amount of regulus or *cheku*, as it is called by the smelters, has collected at the bottom of the furnace, covered by the lighter slag. The charcoal is then raked away, and the surface of the slag cooled with a wisp of wet straw tied to a stick. The solidified cake is removed and the fresh surface cooled; in this way the slag is taken off in two or three successive cakes, leaving the heavier and more perfectly fluid regulus behind, which is afterwards cooled and extracted.

'The regulus (which contains some metallic copper disseminated through it, especially in the form of filiform crystals lining the cavities of the vesicular mass) is pounded and ground, mixed with an equal amount of cow-dung, and made into balls about the size of oranges. After drying, a quantity of these are spread on a layer of charcoal, in a place surrounded by stones, and covered with more charcoal. The whole is then ignited, and the regulus thus roasted with free access of air. The roasted balls are subsequently crumbled down and ground, and the powder sprinkled into the furnace in the same way as the original ore. The slag, when the operation is finished, is cooled and removed in cakes, leaving a fluid mass of metallic copper at the bottom of the furnace. The copper is sold in this state at the rate of Rs. 2. 8 per 3 *sers*, equal to about 10*d*. a pound. It is still vesicular and brittle, and is re-fused before being wrought into manufactured articles; the refined copper is said to amount to about 13 *chhatáks* per *ser* ($\frac{13}{16}$ths) of the crude. Bismán, the Nepálí lessee of the Mángphu copper mine on the Tístá, informed me that the yield from the various operations at his mine was approximately as follows:—1 *maund* of picked ore yields 6 or 7 *sers* of washed ore; 7 *sers* of washed ore yield 4 of regulus; 4 *sers* of regulus yield $1\frac{3}{4}$ *sers* of copper, or from about $3\frac{3}{4}$

to 4½ per cent. of copper from the picked ore. Eight or nine *sers* of regulus are obtained at one operation in about six hours, and 3 or 4 *sers* of copper in about three hours. These figures, however, are not altogether trustworthy.

'MODE OF OCCURRENCE OF THE ORE.—Altogether there are over a dozen localities in the Dárjíling territory and the Western Dwárs where indications of copper have been observed. The examination of these leads to some important generalizations. *1st.* With the exception of some copper near Baxá in the rocks of the Baxá series, all the known copper-bearing localities are in the Dáling beds. Some are, it is true, situated in the transition rocks between the Dálings and the gneiss, but none in the genuine gneiss itself. *2d.* The ore in all is copper pyrites, often accompanied by mundic. Sulphate, carbonate, and oxide of copper are frequent as results of alteration of the pyrites, but they occur merely in traces. *3d.* The ore occurs disseminated through the slates and schists themselves, and not in true lodes.

'COPPER LOCALITIES.—Pankhábárí and Ráni-hát, No. 1.—Mr. Piddington describes specimens of horneblende rock, containing iron pyrites with a trace of copper, from the neighbourhood of Pankhábárí. I obtained a lump of clay slate containing similar pyrites from the bed of the Biswábartti stream. In the bank of the Ráni *nadi*, rather more than a mile above Ráni-hát, a couple of trial excavations have been made about twenty yards apart. One is in quartz-schist, dipping north 15° west at 40°, through two or three layers of which, of from half an inch to an inch in thickness, iron pyrites with a trace of copper is disseminated. The other is in hornblende-schist, and the pyrites here is even less plentiful than in the first. The excavations were not sufficiently promising to induce the miners to continue them beyond a few feet.

'Ráni-hát, No. 2.—About half a mile to the east of the above locality, and perhaps in the same stratum, copper has been worked rather extensively. The spot is a mile north of, and 1100 feet above, Ráni-hát, near the head of the Chochí stream. The rock is quartz, with some horneblende-schist dipping north at about 35°. The copper-bearing stratum averages about 18 inches in thickness. Here and there throughout it, copper pyrites is disseminated in little layers parallel to the bedding. These layers are not solid ore, but throughout them the pyrites is more or less thickly disseminated, while elsewhere in the cupriferous stratum the ore is

absent or only visible in specks. There are six galleries now visible, in five of which the roof has fallen in within 30 feet or less of the mouth. The remaining passage is still open, and extends to a length of over 90 feet. It, like all the others, so far as they are open to inspection, is driven from end to end through the same stratum; and thus, as the passages run more or less nearly with the dip of the beds, they descend at an angle of about 35°. Although there had been an inch of rain a day or two before my visit, the mine was quite dry. As the hillside here is very steep, and the mine is near the watershed between two streams, there is naturally but little water to drain in. The mine was worked for a month or two last year (1873), but is now (1874) temporarily abandoned.

'Mahánandá.—There is an old mine several hundred feet above the Mahánandá on the west side, near the mouth of the Baphupání, which has been deserted for many years, and all the openings have fallen in, so that very little can now be seen. The gangue is horneblende-schist, with quartz-schist and chlorite-schist, dipping north 40°, west at from 30° to 40°. The main cupriferous stratum seems to be about two feet thick, throughout which the ore, with mundic and traces of blende, is disseminated as in the Rání mine, in little strings or clustered particles, and in specks. Several openings have been made in this stratum; and six or eight feet above it, where the rock is also slightly cupriferous, there is a trial opening, which, however, was not carried beyond a yard or two. The last three copper-bearing localities are situated a little south of the gneiss, in the transition bed between it and the Dáling series, and the rock is all quartzose horneblende-schist, on the same horizon. It is not improbable that all belong to one cupriferous stratum, extending at least from north of Rání-hát to the Mahánandá, and it is along this line that any further search for copper in the neighbourhood should be made.

'Mangwá, Páshak, and Rángbang.—Mr. Piddington mentions iron pyrites with a trace of copper at Mangwá, a village near the next-mentioned locality, but no mine appears to have ever existed there. The principal mine at Páshak is on the hillside above the Rángiák stream. It was worked in Dr. Campbell's time by a man named Rájmán, who is said to have lost heavily by it; afterwards by Bhotu, and lastly by another Rájmán, by whom it was abandoned three years ago after the discovery of the Mángphu mine. The cupriferous stratum is quartzose horneblende-schist, dipping

south-west at 15°, through which the ore, with mundic, is very sparsely disseminated. Mr. Piddington's sample of an assay from this locality yielded only $1\frac{3}{4}$ per cent. of copper. There is another older mine at Páshak, close to the bank of the Rángiák, which has entirely fallen in. The Páshak and Mangwá copper localities appear to be on the same horizon as those of the Mahánandá and Ráni-hát. Copper is said to have been recently found near the head of the Rángbang, west of Páshak, but I did not hear of it until after I had left the neighbourhood.

'Rattu.—The Rattu mine is in Independent Sikkim, but I visited it, as it was being worked at the time. The rock is grey clay-slate, with interbanded lenticular layers of quartz, through both of which the ore occurs, but chiefly in the latter. The strata dip at high angles, and vertically, with an irregular strike from north-east —south-west to north—south. The mine is in a ravine which runs nearly parallel to the direction of the strike, so that the entrances cut across the bedding, but inside there are also drifts ramifying parallel to it. The mine is extremely wet, with rivulets of water running down some of the passages. The men are therefore unable to sink below the level of the stream outside, into which the water drains. The ore here is the best I have seen, and occurs in considerable quantity, as is evidenced by the extent of the excavations. Several heaps of good picked ore, very free from mundic, were lying about, a carefully selected average sample containing 9·1 per cent. of copper. A sample, taken from a heap of pounded ore ready for washing, gave 7·8 per cent. when assayed.

'Kálingpang and Re-ung.—The mine about two miles north-east of Kálingpang is in a wrinkled and wavy clay-slate, dipping south-east at 60°, and containing irregular and more or less lenticular little seams of quartz parallel to the bedding, and interbanded layers of very hard and tough light grey quartzite. It is in this rock and in the quartz seams that the ore (with a little magnetic pyrites) mainly occurs, although a little is also visible in the slate itself. The proportion, even in the quartzite, is very small. The mine was worked a couple of years ago, but was given up on account of the hardness of the rock. There are two openings near each other, the larger of which extends about 40 feet along the strike of the beds, with a maximum depth of 10 or 12 feet. About a quarter of a mile above the mouth of the Re-ung, a trial drift has been made some 20 feet above the bed of the stream. The rock, which is clay-slate,

with interbanded layers of quartzite, dipping north 30°, east at 40°, contains copper pyrites disseminated through it, but in such small quantity that the drift was abandoned after a few feet of progress. This station is nearly on the same horizon as the Mángphu cupriferous beds.

'Mángphu.—The Mángphu copper mine on the Tístá is the only one in Dárjíling territory that is worked at present (1874). It was, as I was informed, first opened about four years ago, and it has the reputation of being the best mine in the District. The lessee last year was a Nepálí named Bismán; his lease expired on the 15th November 1873, and had not been renewed at the time of my visit in January 1874, so that mining was temporarily suspended, and the men were engaged in smelting the small remainder of ore on hand.

'These mines are on the hillside on the left bank of the Tístá. The latest worked, which are said to have been the most productive, are about 500 feet above the river. The rock is a light green and greenish grey clay-slate, containing irregular layers of a grey fine-grained slaty sandstone, and dipping north to north-east at from 30° to 40°. The ore, with which there is little or no mundic, occurs in both varieties of rock. Throughout the entire thickness cut through in the galleries (some 3 feet), cupriferous layers occur here and there, while in the intervals the ore only occurs very sparingly, or in specks. The lenticular cupriferous layers, which are parallel to the bedding, vary in thickness up to several inches, or even occasionally, as Bismán told me, up to a foot. Throughout these the ore is more or less abundantly disseminated, and little nests or short irregular layers of the pure mineral sometimes occur, as much as half an inch or an inch thick. The main passages descend with the dip of the beds from the out-crop, the deepest being 46 feet in length. There are three others close to this, one of which has fallen in. At the time of my visit they were perfectly dry.

'Five feet below these galleries there is an abandoned trial opening, and another about 100 feet higher up, from both of which copper in small and not remunerative quantities was obtained. Seven hundred feet above the river, there are several openings throughout a thickness of 20 or 30 feet of strata, which have been abandoned, and nearly all of which have fallen in. It appears, then, that throughout a thickness of at least 200 feet, these slaty rocks contain cupriferous bands at intervals, and that a few of these are

moderately productive. But out of 15 or 16 galleries opened, the majority have been abandoned and allowed to fall in. Bismán informed me that only three had paid. As lessee of the mines, however, he would not be likely to unduly magnify their value, and it is possible that some of the abandoned galleries were given up from their having been driven as far as the miners thought it safe to go. If the information Bismán gave me is correct, the average yield of copper from the picked ore is about 4 per cent. He told me he had made 72 *maunds* ($52\frac{3}{4}$ hundredweights) of copper during his year's tenure of the mine.

'Sampthár.—In a lateral ravine which joins the Lesu south of Sampthár, some indications of copper have been exposed by a land-slip, and the out-crop was cleared for my inspection. The rock is clay-slate with occasional lenticular layers of quartz, in which most of the copper pyrites, associated with mundic, occurs. These layers contain a considerable proportion of ore, but there were only two or three of them exposed, varying in thickness from 2 inches downward. The dip of the beds is west 20°, north at 30°.

'Chel River.—This mine, the mouth of which is on a level with the stream, is now completely filled with stones and water, so that nothing can be seen except that it is driven into clay-slate dipping east of north at 30°. It is on the western bank of the Chel, at a point where the river, which flows in two channels above, again joins into one. A Nepálí, who was sent to show me the place, and who had worked in the mine, told me that the locality was indicated to him and others, who were searching for copper about four years ago, by some fishermen on the Chel, who had observed what they thought looked like ore. After much labour the miners succeeded in turning all the water to the eastern side of the channel, thus leaving the western bank dry. The mine was carried to some 20 feet from the surface, following the dip of the beds, the seam varying from about 4 inches to a foot in thickness. Twenty *maunds* ($14\frac{3}{8}$ hundredweights) of copper were smelted during four months' work. The hot weather had then set in, and seven men died of fever. The lessee of the mine, who had gone to Dárjíling to sell the copper, also died, and hence the mine was abandoned. The seam, however, still maintained its full thickness, but its value is greatly diminished by its position. There is no high ground near, so that it must be worked below the level of the stream, and the influx of water would undoubtedly be very great. Four years ago, a small

quantity of ore was extracted from a ravine west of the Chel, by the same men who worked the above-mentioned mine. The slates here dip north at 40°; the seam was described to me as only 1 or 2 inches thick.

'Baxá.—About half a mile west of Baxá in the Western Dwárs (now included within Jalpáigurí District), there is a spot on the hillside where copper has been found, but not worked. The rock is greenish slate with quartzose layers, the latter especially containing mundic and copper pyrites, and the surface *débris* at the spot is cemented into a gossany *breccia*. The proportion of mundic is greater than that of ore.

'The localities in British territory where copper is known to exist may be grouped thus:—(1) Mine now worked,—Máṅgphu. (2) Mines abandoned, but still partially open,—Ráni-hát, Páshak No. 1, and Kálingpang. (3) Mines abandoned and wholly fallen in or choked up,—Mahánandá, Páshak No. 2, Chel river, and ravine west of Chel river. (4) Localities where trial openings have been made and abandoned,—Pankhábárí, Ráni-hát, Mangwá, and Re-ung. (5) Localities recently discovered and not yet tried beyond merely clearing the out-crop,—Rángbang, Sampthár, and Baxá in the Western Dwárs (Jalpáigurí). It appears that out of the above 14 localities, 4 have been tried by the native miners, but have not been considered sufficiently promising to induce them to go on. Of the mines now wholly fallen in or choked, that in the ravine west of the Chel river was reported to me as very poor and unimportant, but the seam in the Chel itself was described as decidedly rich compared to most of the others.

'The proportion of ore now apparent in the Ráni-hát and Páshak mines is very small; but this cannot be considered a fair criterion of their value, as the miners would not be likely to abandon them if there were any tempting layers of ore exposed at the time. The same seam probably varies much in productiveness, and a mine would most probably be abandoned when the seam was least productive, although the percentage of ore might again increase if the work were carried on farther. No very trustworthy opinion can, therefore, be formed as to the value of these mines in their present state, but there seems no reason to suppose that they were ever more than fairly productive to the native miners, if even always that. I think Ráni-hát is the better of the two. Mr. Piddington's assay of ore from the Páshak mine gave only $1\frac{3}{4}$ per cent. of copper. The pro-

portion of ore at Kálingpang is about equal to that at Ráni-hát; but the rock is extremely hard and tough.

'Work at the Mángphu mine had been suspended for a couple of months at the time I visited it, and the only ore yet unsmelted was some which had been powdered, and left uncovered exposed to the wash of the rain. I was, therefore, unable to get any average samples from considerable heaps. The proportion of ore, however, exposed in the newest galleries, was considerably greater than in any of the deserted mines; but several galleries and trial drifts had been abandoned. According to Bismán, the Nepálí lessee of the mine, the average yield of copper from the picked ore is about $3\frac{3}{4}$ to $4\frac{1}{2}$ per cent. This is equal to poor Cornish picked ore. The Rattu mine in Independent Sikkim is, as I have said, the best I have seen, the picked ore there containing 8 or 9 per cent. of copper, which is slightly above the average yield of Cornish ore. The exposure of the out-crops does not lead me to suppose that the Sangthár and Baxá seams would turn out above the average of those elsewhere.

'It appears, then, that the best seams are fairly productive, while the working of others does not seem to have much more than covered expenses, and some have resulted in a loss. The miners have not a thriving look about them, and the number of deserted mines is in itself suggestive that copper-smelting in the Dárjíling hills is not a very lucrative employment. The prospect cannot be considered very encouraging towards any attempt to work these mines systematically. No doubt the native miners make a living out of them, barbarous as their way of mining is. The chief disadvantages of that system, however, lie in the injury to the seam, and the wastefulness by which the greater part of it is left behind in the mine, while the latter can only be carried to a trifling depth from the surface. The system is, perhaps, not greatly more expensive, with regard to what ore is obtained, than a more civilised method of procedure would be, as long as the mines are shallow. The miners may locate themselves at some likely looking spot, and make a profit if they gain sufficient ore to smelt a few *maunds* of copper. If a venture does not turn out well, or when a locality is beginning not to pay, they have merely to pack up their skin bellows and a few tools, and to remove elsewhere, leaving behind them the remains of their clay furnaces and a few huts made of branches.

'I do not think the natives can be easily induced to adopt a

better system of mining. It is that which they and their fathers before them have always practised; they have no one to teach them a better; nor capital, or perhaps inclination, to adopt it if they were taught. One step, however, in this direction might I believe be taken—by granting longer leases of the mines. The present system is to put up the leases to auction yearly; which must foster a hand-to-mouth mode of working, as the lessee's interest is to get as much as possible out of the mine at the time, careless of what becomes of it afterwards. If he were sure of possession for a term of years, it would be more worth his while to attempt some degree of system. No doubt he can always retain possession by bidding highest, but he has no guarantee that the bidding may not go above the real value of the mine. I think that if permission were given to work any of the deserted mines free for a year, so as to allow the miners fairly to test their value; and after that, that leases were granted for a term of years by tender or auction, men would be found willing to reopen some of them.'

'LIME.—There are three sources from which lime is procurable in the area under discussion; namely, from the dolomite of the Baxá series, from the impure limestone beds of the Tertiaries, and from calcareous tufa. It is the last rock only that is, or I believe ever has been, burned for lime in Dárjíling.

'Dolomite.—The analyses of two samples of the dolomite from the Títí *nadí* are as follow:—Light grey saccharoid—Carbonate of lime, 59·7 per cent.; carbonate of magnesia, 37·8; oxide of iron and alumina, 1·0; insoluble matter, ·8. White, almost crypto-crystalline—carbonate of lime, 60·5; carbonate of magnesia, 38·7; oxide of iron and alumina, and insoluble matter, ·3. The rock contains an excess of lime over that in normal dolomite, and is almost quite free from impurity. A high range of hills is entirely formed of it, so that the supply is inexhaustible; but the dolomite hills west of the Torshá are in Independent Bhután, just beyond the British boundary, and the Bhután authorities would, no doubt, demand a royalty for working the mineral. For the supply of Jalpáigurí, the most advantageous locality is a ravine a little east of the Rektí *nadí* (north of the 21st boundary mark). The rock in the lower part is black slate, above which is dolomite, forming a naked precipice at the head of the ravine, from which numberless large and small blocks are washed down every rainy season, so that there is no necessity to quarry. A considerable quantity of gravel, and

small lumps of a convenient size for burning, are washed across the frontier into British territory. The dolomite to the east of Baxá is within the British boundary.

'Tertiary limestone.—The clunch beds are very frequently more or less calcareous. Sometimes the calcareous matter is segregated into nodules, and these even pass into short, irregular beds of impure grey or yellowish limestone. Some rock of this kind from the Chirankholá *nadí* has been analyzed, with the following result:—Carbonate of lime, 68·7 per cent.; carbonate of magnesia, 1·7; oxide of iron and alumina, 1·3; clay, 27·4; sand, ·6; loss ·3. It is thought probable that a species of natural cement will be yielded by this stone, more especially by a kind containing more clay than the above. The beds, however, are thin, not very frequent, and irregularly scattered through the clunch, so that no quarries, beyond perhaps some small pits, could be opened. Considerable quantities of calcareous boulders are washed down by some of the streams; but they vary in composition from a rock like the above, containing about 70 per cent. of carbonate of lime, to a merely calcareous clunch, so that it would be difficult to obtain a stone for cement purposes having a uniform composition. A rough approximation to the composition can be gleaned from the fracture, which is rough and uneven in the calcareous clunch, becomes less rough and uneven as the proportion of lime increases, until in a rock like that of which an analysis is given above, it is smooth and conchoidal.

'Calcareous tufa.—The lime used in Dárjíling District is derived entirely from calcareous tufa. In the Ramtek *nadí*, where a quarry is at present worked by a Lepchá, I had an opportunity of observing the way in which it is burned. The kilns, which are over 15 feet in internal diameter, consist each of a circular wall about 10 feet high and 2 feet thick, built of flattish stones from the bed of the adjacent stream. The interstices of the inside are luted with clay, and at the bottom are two orifices at opposite sides, about 3 feet high by 2 feet broad, for the admission of air, from one of which the lime is withdrawn. There is a rough shed close to the orifice, in which the lime is stored.

'The kiln is filled to within two feet of the top with logs of wood, and then the tufa, in pieces averaging from 2 to 4 inches in length, is thrown in and piled up into a low cone, the edge of which is on a level with the top of the wall, and the apex some feet above it. After being lighted, the kiln burns for about a week; when toler-

ably cool, the lime is extracted from below and slaked with water, in which state it is sold. The uppermost part of the heap of tufa, which is exposed to the air, and which merely acts as a blanket to keep that near the fire hot, is scarcely burned at all, and is returned to the kiln at the next firing. The system of adding the fuel and limestone in alternate layers, and of keeping the kiln continuously fed, seems to be unknown. I was told that the average yield per kiln at one operation is about 300 *maunds* (220 hundredweights); and that the sub-contractor who burns the lime receives 8 *ánnás* a *maund* or 1s. 4d. a hundredweight for it on the spot from the lessee of the quarry. The actual cost of lime-burning in Dárjíling District (including quarrying tufa, cutting wood, etc.) seems to be about 6 *ánnás* a *maund*, or 1s. 0½d. a hundredweight; but owing to the expense of carriage it was selling this year at Pankhábárí at Rs. 3 per *maund*, or 8s. 2d. a hundredweight; and at Jallápahár, at Rs. 2. 6. 0 a *maund*, or 6s. 6d. a hundredweight. The lime in the latter case came from a place in Sikkim, some miles across the boundary, at an elevation of 3500 or 4000 feet. From thence it had to be carried across the valley of the Rammán, where the elevation is only 1600 feet, and then up to Jallápahár, which is upwards of 7000 feet above the sea.

'The tufa is nearly all pure carbonate of lime, even when the rock from which it is derived is dolomite. Thus, analyses of that from the Títí *nadí* gave the following results:—Ordinary porous tufa-carbonate of lime, 98·10 per cent.; carbonate of magnesia, 1·30; oxide of iron, alumina, and insoluble matter, ·80. Crystalline tufa, — carbonate of lime, 98·50; carbonate of magnesia, 1·50; oxide of iron, alumina, and insoluble matter, ·06. Both carbonates of the dolomite are converted into bicarbonates, and dissolved by water holding carbonic acid in solution; but the bicarbonate of lime being the less stable compound, is decomposed first, with deposition of tufa, while the bicarbonate of magnesia is carried off in the water. The tufa is nearly always porous, the crystalline variety being rare. There is a peculiar species of moss often seen growing on it, which the natives assert turns into, and is in fact the origin of, the tufa. I observed what probably gives rise to this idea in a ravine east of the Rektí *nadí*. The water of the stream is so charged with calcareous matter, that the dead leaves and twigs in its bed are thickly encrusted with it. Deposits of tufa have been formed at every little cascade, on which the moss grows out more

or less horizontally, and along the sprays which point downwards the water trickles from root to apex, and then drips off. Thus, little stalactites are formed, each of which encloses a spray of moss in the centre, and gradually encroaches on the root; while the plant keeps pace in its growth at the other end, and crowns each stalactite with a living rosette. The calcareous matter forming these deposits is derived from various sources,—from the dolomite of the Baxá series, the calcareous clunches and impure limestones of the Tertiaries, the calcareous sandstones of the Dámodars, and the occasional calcareous bands in the Dáling beds.

'As might be expected, the largest masses are found along the base of the dolomite hills, where there is what I believe may be considered an inexhaustible supply of lime from this source, independent of the dolomite itself. At the Bandapání waterfall (within the British boundary), where there is a series of rapids and cascades of perhaps 50 feet, the stream flows continuously on a tufa bed for at least two or three hundred yards, the thickness of the deposit, where seen at the lower end, being 7 or 8 feet. There is a thick deposit near the 20th boundary mark, which cements the *talus* at the foot of the hill into a coarse *breccia*. Close to the Torshá river there are masses of tufa at the foot of the hills, forming cliffs 30 feet high; and there are numerous masses where the Jangtí *nadí* cuts through the dolomite. These are some of the localities in which I have observed deposits of the kind, but they are no doubt to be found in almost every ravine and water-course.

'The magnesian and pure lime from the dolomite hills is therefore well worth attention. It might be burned, either close to the Torshá river (a stream which is navigable for the largest dug-outs as far as the foot of the hills, and for larger boats to within a few miles of them), and thence taken down the Brahmaputra; or in the vicinity of Jayánti hill, east of Baxá. The latter locality is, however, less favourably situated, as it is some miles from the Ráidhák, which is a smaller stream than the Torshá. When the Northern Bengal State Railway is complete, the lime might be burned at the western end of the range, carted to Jalpáigurí, and then taken by rail either to the foot of the hills at Sukhná, or down country. By one or other of these routes it might compete with the Sylhet lime from Chatták (Chuttuck) over a considerable portion of Lower Bengal, if not in Calcutta itself. Tufa, derived probably from calcareous Tertiary beds, has been worked in a ravine off the

Demá *nadí* for the supply of Baxá with lime. The deposit has recently, however, been buried by a landslip.

'The tufa deposits in Dárjíling District, which are derived, not from large masses of limestone, but from rocks generally containing only a small percentage of calcareous matter, are on a much smaller scale than those in the Dwárs. It is from them, however, or from similar deposits in Sikkim, that the lime used in the District is procured. Tufaceous masses seem to be more common along the Tertiary Dámodar boundary than elsewhere, probably on account of the issue of springs there.

'The following list includes all the tufa localities with which I am acquainted :—(1) West of Pankhábárí in a water-course 500 or 600 feet above the Bálásan, formerly worked, but now exhausted. (2) In the neighbourhood of the Dárjíling cart road, tufa is found in several of the water-courses a few miles from the plains. Generally it does not exceed a few inches in thickness, covering the rocks in the beds of the *nálás*, and giving them a rounded appearance as if all solid tufa. Sometimes there are thicker accumulations. The bed of one steep water-course I ascended was lined with it for 30 or 40 yards, the tufa hanging down here and there in stalactites. It is derived in this neighbourhood from Tertiary calcareous clunch, and has been worked in several places. (3) On the east bank of the Mahánandá, just north of the Dámodar-Dáling boundary, tufa occurs in small quantity. (4) Tufa was formerly worked near the end of the spur at the junction of the Sivakholá and Mahánandá. (5) A small deposit is said to have been found within the last few months on the hillside, a little below the mouth of the Kuhí *nadí*. (6) Near the head of the Kuhí there is a deposit, from which lime has been rather extensively burned within the last year or two. (7) Tufa occurs in small quantity near the head of the Sívak *nadí*. (8) It is found in considerable quantity in some of the ravines which join the Riyam near its mouth, but has not been worked as yet. The Tertiary rocks here are more than usually calcareous. (9) Tufa was formerly worked at Páshak, but the locality is now exhausted. (10) It is said to have been lately found at the head of the Ráng-bang *nadí*, to the west of Páshak. (11) There are two abandoned quarries near the head of the Sím *nadí*, to the north-east of Takdá. The rock from which the tufa has been derived is a calcareous actinolite rock. By following the strike of this, other deposits would no doubt be found. (12) In the Sambúl *nadí* to the west

of Damsáng there is a mass of tufa some 80 feet long and 20 feet high, with a thickness varying up to 2 feet or so. There is also a smaller deposit about 150 yards higher up stream. (13) Near the left bank of the Lesu, a little above the Phing or Thaphing *nadí*, there is a mass of tufa through and over which a spring of water issues. It seems to be more than a foot thick in places. (14) In the Ramtek *nadí* (a small tributary of the Lesu), tufa was being quarried this year from by far the largest deposit I have seen in the District. Part of it is concealed by surface soil, but the portion visible is about 150 feet long, by from 30 to 40 feet broad, with a thickness of 8 feet at the side where it was being quarried. A little higher up-stream there is a smaller deposit, and near the head of the *nadí* some of the water-courses are lined with tufa.

'BUILDING STONE, ETC.—There is little demand for other building stone than rubble, which is generally procurable from the rocks nearest at hand. Coarse slate from the Dáling beds; gneiss, which usually is easily split into conveniently sized pieces; and, near the foot of the hills, the harder Tertiary beds, are the varieties of stone mostly used for such purposes. Freestone in blocks of any size could be procured from the Tertiary sandstones; but unless carefully selected, its durability would be open to question. There is comparatively little stone from which good ashlar can be obtained in the older formations. The Dáling beds are mainly slaty. Good-sized blocks can be quarried from the gneiss in places, but generally it is too schistose to furnish such. A few of the Dámodar beds of sandstone are also capable of being worked.

'SLATE.—Shortly after my arrival in the District, my attention was directed to a reported discovery of roofing slate. On an examination of the locality, however, I found that the slate was in no way superior to that frequently found amongst the Dáling beds elsewhere. From the best slate I have seen, slabs cannot be procured more than a few inches across, with a thickness of a quarter of an inch, and these are too brittle to trim well at the edges. Flagstones for flooring purposes could, however, probably be worked in some places.

'CLAY.—The gneiss decomposes superficially into a light-brown, very plastic clay. Both it and the clay resulting from the decomposition of the Dálings are used throughout Dárjíling District for making bricks. Some of the Dáling slates decompose into a white clay, which might be used for pottery. There is a quantity of this

material near the right bank of the stream, at the debouchure of the Sakkam. I am told that similar stuff is used in Sikkim for white-washing.'

MANUFACTURES.—The manufacture of tea, which forms the staple industry of Dárjíling District, is mainly conducted by European enterprise and capital, and will be treated of subsequently (pp. 164–176). The ordinary manufactures carried on by the natives of the District are of a very simple character. The strong cotton striped cloth, which forms the dress of the Lepchás, is of home manufacture, and is woven by the women of the tribe. The Bhutiás manufacture a strong cloth from the bark of a species of nettle. The Nepálís manufacture an excellent cotton cloth, 32 *háths* or cubits in length, called *batisá*. The Hindu Nepálís, according to their castes, are also workers in iron, pottery, and a coarse kind of matting. In their own country, but not in Dárjíling District, the Nepálís manufacture a coarse kind of paper, made from the leaves of a jungle plant which they call *deh*. In the *tarái*, ordinary coarse cloth, gunny-bags, and common pottery form the only manufactures, which are carried on by Tántís, Rájbansís, and Mechs. With the exception of the Tántís, or professional weaving caste who have no other occupation, no class or caste in the District subsists entirely by manufactures, but all in addition cultivate a small plot of land as a subsidiary means of maintenance.

TRADE AND COMMERCE.—The District trade is conducted by means of weekly markets, held in the towns or large villages; and also by annual fairs or religious gatherings, where trade is carried on to a considerable extent. The principal of these weekly markets are held at Dárjíling, Námshu, Rohiní, and Karsiáng in the hills; and at Phánsidevá, Bághdokrá, Siliguri, Nuksárbári, Udaikári, and Karáibári in the *tarái* Sub-division. The four principal religious trading fairs are held (1) on the banks of the Great Ránjít river, and (2) at Námshu, on the banks of the Bálásan river, both in the hills; and (3) at Nuksárbári and (4) Hánskoá in the *tarái* Sub-division. Of the local manufactures, tea and coarse bags woven from jute are chiefly manufactured for export. The crops of the District, with the exception of rice and potatoes, suffice for local wants only. I have been unable to obtain any return showing the value of exports and imports, or the extent to which trade is carried on.

TRADE WITH THIBET AND CENTRAL ASIA.—The establishment

of trading relations between British India and Thibet and Central Asia is a subject that has long received close attention from Government. In furtherance of this object, and on the ground that the construction of a trade route through Dárjíling and Sikkim was practicable, Mr. J. W. Edgar, the Deputy-Commissioner of the District, visited Sikkim in October and November 1872; and as the results of his tour, submitted to Government a detailed report 'regarding the actual extent, condition, and prospects of trade with Thibet, the best line for the construction of a road over the passes, and on other matters which would enable Government to take action upon the important question of the resumption of commercial intercourse between India and the countries beyond its northern frontier.' The following paragraphs, embodying an outline of Mr. Edgar's report, and of the Lieutenant-Governor's conclusions as to the feasibility of opening out a trade route into Thibet from Dárjíling, are quoted from the Annual Administration Report of Bengal for 1873-74:—

'The subject in connection with this question which has attracted the greatest interest relates to the routes available for communication with Thibet from our territories; and an opinion has been expressed, which is now strongly supported by the papers before Government, that the best route to encourage will be the route through Sikkim from Dárjíling, in connection with the Northern Bengal Railway. While all our attempts towards the exploration of the routes into Thibet from the Bhután Dwárs and the Assam valley have hitherto failed, and the difficulty always presents itself that the passage through the Nepál Districts to the west would have to be secured through foreign and semi-civilised territory, we have now the assurance, confirmed by Mr. Edgar's personal experience, that a safe and practicable line of communication can be effected in almost a direct course to the Thibetan frontier, passing through a country which is in friendly relations with us, and willing to give such assistance as lies in its power to attain the object we have in view. The choice or approval of one pass before another is, however, not at present a matter of any pressing importance; and the decision as to the particular pass by which communication is to be established with Thibet may well be deferred till the questions regarding the construction and maintenance of a road through Sikkim are definitely settled. On this point the Lieutenant-Governor believes that the time and circumstances are encouraging for the construction

of such a road. We may expect, in the absence of unforeseen contingencies, to see finished within two years from the present time (1873–74) the Northern Bengal Railway. Great as the material advantages will be when the completion of this railway will open out large and important Districts between the Ganges and Dárjíling, —the facilities of communication, the easy access to hill sanataria, and the development especially of the tea industry in the Dárjíling *tarái*,—the Lieutenant-Governor has submitted his opinion to the effect that the Government should avail itself of the present opportunity of extending such means of communication in connection with this railway, *beyond* Dárjíling, by giving effect to those provisions of the treaty of 1861 with the Sikkim Ráj which refer to the construction of a road through its territory.

'In this view the Lieutenant-Governor suggested that, adopting the recommendations already made as to the line of the road, its course should be professionally surveyed by a competent officer. The Lieutenant-Governor is quite prepared to endorse the views expressed by Mr. Edgar in one of the concluding paragraphs of his report, when, speaking of the importance of a road through Sikkim to the frontier, he says: "Although the construction of such a road would of course at the outset be regarded with much suspicion by the Thibetáns, I have little doubt that, if once it were made, friendly relations with Thibet, and a trade singularly advantageous to both countries, would follow almost of themselves; and without such a road, I do not expect much good from other measures. It is a surprising thing that no steps should have been taken to make a road immediately after the treaty of 1861; but I venture to hope that the matter may now receive the favourable consideration of Government."

'And surely there is a great opening for legitimate and civilising commerce in the completion of such a project. We are not so much pressing upon the people of Thibet the introduction of a new thing to which recent necessities had given birth, as endeavouring to secure the revival and permanent establishment of that which not only existed before, but which owed its existence to the initiative of the ruling authority in Thibet. In Part I. of the selections from the *Calcutta Gazettes* from 1784 to 1788, containing historical and State papers, edited by the President of the Record Commission, there is a notice issued by the Governor-General in Council to native merchants of Bengal, intimating the desire on the part of the Rájá

of Tishu Lombu "to open an intercourse of trade between Bengal and Thibet," and promising encouragement and assistance to all who were willing to embark in the undertaking. Coming down to a later date—indeed a date so recent as the year 1864—it appeared that there were inquiries instituted on the subject, which originated with information in a great measure supplied by Chebu Lámá, who represented that the trade between India and Thibet was yearly increasing, and had then assumed considerable proportions. This was fully confirmed by the report of the Deputy-Commissioner, who showed that there had been a steady annual increase of trade both with Sikkim and Thibet during the four years brought under notice; that with the then improved relations with Sikkim, the great difficulties to a wider expansion of traffic arose solely from imperfect communications in a mountainous country; and with reference to this the hope was expressed, as now, that the execution of the project of a main road from Sikkim to the frontiers of Thibet, in connection with a railway from Calcutta, would no longer be delayed. It was represented that a considerable portion of the China trade would, with the completion of such a road, be diverted from other and more circuitous routes, and would result in making Dárjíling, with its fine climate, an important mercantile centre.

'In approaching the consideration of the questions connected with the character and extent of a possible trade with countries beyond Sikkim, we should always have to bear in mind the general poverty of Thibet. As a whole, Thibet is very thinly populated, the greater portion of its inhabitants living at great heights, varying between 9,000 and 11,000 feet. In the absence of trustworthy statistics of its trade, Mr. Edgar admits an inability to furnish anything approaching to complete information on the subject; but, from the inhospitable nature of the climate, and the extreme desolation of its most barren parts, we may conclude with some certainty that it can boast at present of few valuable productions for export. From such data as could be collected by Mr. Edgar, we find that while there is almost an entire absence of manufactures in the country, Thibet is really wealthy in cattle, and abounds also in minerals; its gold fields, hitherto little explored, extending (as we learn from other sources) from Rudok to Lhássá, some 700 miles. From feelings of superstition, it is alleged the authorities are opposed to the working of the silver mines especially, and at least it is quite certain that no systematic attempts have yet been

made for the development of these natural resources. There can, however, be little doubt that, were the way once opened for regular commercial transactions, self-interest would operate on a people said to be "eminently a commercial people" to work the gold and silver mines. It is the same as regards "the magnificent flocks and herds, which are now almost wasted for want of some means of conveying them and their produce to the markets of India;" and the hardy and useful Thibetán ponies, which are even now brought in small numbers, though at much risk, to the Dárjíling market. In all these directions, considerable openings for a legitimate and valuable export commerce are apparent, if a good road existed.

'The advantages, however, are much more marked when the traffic which we can carry into these trans-Himálayan countries is looked at. The following quotation from Dr. Walker's *Cyclopædia* places the subject in a clear and intelligent form:—"Through Dárjíling is the shortest mountain passage across the Himálayas into Thibet and Central Asia, and there is no doubt that a large commerce in British manufactures could be established for these countries. Mr. Moorcroft gave it as his opinion that it is at our option whether Central Asia shall be supplied with goods from Russia or England. The brothers Schlagenweit corroborated that view. Mr. Bogle said that the trade must have been a very considerable one in broadcloths, and that the demand for it was still very great in his time. Dr. Hooker, in his evidence before the Colonization Committee, said there was nothing the Thibetáns admired so much as the cloth of his garments, and he believed if they could obtain British woollens they would gladly use them."

'These opinions of very competent authorities find strong confirmation in the information which is now before Government. English woollens and broadcloths are still much sought after, though apparently they have to contend with Russian competition. It is well established that, notwithstanding the policy of exclusiveness which Chinese influence dictates and imposes upon Thibet, European goods find their way to Thibetán centres of trade at Jagarchi, Nagarchi, and Lhássá, but they are mainly imported into Thibet through Nepál and Ladákh by Cashmírí and Newár traders, who reside at the great marts. A large quarter in the capital at Lhássá is inhabited exclusively by Cashmírí traders, who traffic with Ladakh, and to some extent with India through Nepál, but are not allowed to pass through Sikkim.

'If we attempt to follow on a map the course of this trade, and bear in mind the other material facts connected with it, as, for instance, that the Cashmírí merchants pay in bullion (the produce of the country) for the articles they have imported, and that much of the silver, for the most part imported into Thibet from Assam by the Tawáng route, thus finds its way back into India, we can have little doubt that, if the necessities of the people surmount such difficulties, they would soon break down all the opposition which quasi-political exigencies create, when the facilities of a direct communication were permanently established. In other passages Mr. Edgar brings to notice the large expansion of trade which might possibly arise from the introduction of Dárjíling teas into Thibet. It is quite understood that the existing prohibition on the importation of our teas into that country is entirely in submission to Chinese authority. Possibly our producers, if the trade in tea were free, might, in course of time, supplant the China article both in quality and price; but probably this would be the latest concession which the Chinese Government would voluntarily make, and remonstrances against their exclusiveness in such a matter would meet with little response. It would be different in the case of salt, in which Chinese interest would not to the same extent conflict with ours. Mr. Edgar's opinion, that "the market for Thibet salt must for the present be almost exclusively local," is scarcely confirmed by other accounts, which state that nearly all the salt consumed in the Himálaya comes from Thibet, and that the supply of the article from that country extends to some of the Chinese provinces, and even to the north of Burmah. Certain it is that salt produced by solar evaporation abounds throughout Thibet, and that it is carried with immense labour upon the backs of men, women children, and animals to many parts. Even taking Mr. Edgar's prices of Thibet salt at present sold at Dárjíling for Rs. 8 a *maund*, against sea-borne salt at the same place for Rs. 10, there can be little fear that, with communication and transport cheapened by the opening of the Northern Railway, any recourse need be had to the imposition of a duty upon the foreign article. It is the Lieutenant-Governor's opinion that the salt from Calcutta, as better and cheaper under the conditions named, would quite supersede the produce from Thibet, and possibly find its way beyond Thibet. In all these things the prospects are encouraging. The trade has not to be created, but exists. The traders are ready, also, if but the

means are open, which it is desired to bring prominently under the consideration of the Government of India. So far the opportunity is in our own hands, and we should not be slack in taking advantage of it; and if to this can be added the hope that Her Majesty's representative at the Court of Pekin could prevail upon the Imperial Cabinet to discountenance the interference of its agents at Lhássá against the admission of our goods and merchandise, nothing would be wanting to ensure the most unlimited success.'

CAPITAL AND INTEREST.—Accumulations of coin are not usually hoarded in Dárjíling, as in the southern Districts of Bengal. Capital is largely expended in trade and in extending cultivation; a good deal also finds its way into Sikkim and Nepál, being probably the savings of Bhutiá and Nepálí settlers, sent to their relatives across the border. Rates of interest for money are very high. The local English bank charges as high as 18 per cent., and this may be taken as the lowest rate current in the District. Native *mahájans* and money-lenders seldom charge less than 24 per cent.; the Deputy-Commissioner states that the usual rate charged by them is 36 per cent., and that 48 per cent. and even 60 per cent. per annum are by no means unknown rates of interest. The same rate of interest is ordinarily charged upon a large as upon a small loan transaction. Loans to cultivators usually take the form of an advance of grain, the lender having a tacit lien upon the crop. The advance is repaid in kind (with an addition of one-half, or 50 per cent. above the amount lent) at harvest time. From 7 to 10 per cent. per annum is considered a fair return for money expended in the purchase of an estate.

IMPORTED CAPITAL.—Tea manufacture forms the staple industry of Dárjíling District. It is conducted almost entirely by means of English capital, and under skilled European supervision; and the cultivation of the plant is making rapid and steady progress every year. The discovery of tea in Bengal dates from 1826, when a Mr. Bruce, who commanded a division of gunboats in Upper Assam in the first Burmese war, found the plant growing indigenously, and brought down with him some plants and seeds. In 1834 a committee was appointed to inquire into and report on the possibility of introducing the cultivation of tea into India. In 1835 a first attempt was made by Government to establish an experimental plantation in Lakhimpur in Upper Assam; but it failed,

and the plants were afterwards removed to Jáipur in Síbságar District, and a garden established, which was sold to the Assam Company in 1840. This company, which was established about 1839, was the first, and is still very much the greatest, concern for the cultivation of tea in Bengal. Attempts were first made to introduce the cultivation of tea into Dárjíling some time previously to 1853, when two or three gardens existed; but the real date of the commencement of the industry may be taken at 1856-57. Of the existing gardens in the District, as returned to me by the Deputy-Commissioner, only two date as far back as 1856, viz. that of the Karsiáng and Dárjíling Tea Company, and one owned by the Dárjíling Land Mortgage Bank. The earlier planters, owing to want of experience, made many mistakes, and their ventures did not meet with success. These mistakes have now been remedied, and the last ten years have been a period of steadily increasing prosperity. The following table shows the number of gardens, extent of land cultivated with tea, together with the out-turn, etc., for each of the five years from 1866 to 1870 inclusive, and also for 1872, 1873, and 1874. I have no returns for 1871 :—

COMPARATIVE TABLE OF TEA OPERATIONS IN DARJILING DISTRICT, FOR THE YEARS 1866–70, AND IN 1872, 1873, AND 1874.

YEAR.	Number of Gardens.	Extent of Land under Cultivation, in Acres.	Out-turn of Tea in Lbs.	Number of Labourers Employed.
1866, . .	39	10,392	433,715	*Not known.*
1867, . .	40	9,214	582,640	,,
1868, . .	44	10,067	851,549	6,859
1869, . .	55	10,769	1,278,869	7,445
1870, . .	56	11,046	1,689,186	8,347
1872, . .	74	14,503	2,938,626	12,361
1873, . .	87	15,695	2,956,710	14,019
1874, . .	113	18,888	3,927,911	19,424

The largest tea concern in Dárjíling District is that of the Dárjíling Company Limited, which owns four gardens, established between 1860

and 1864. These gardens are called Ambutiá, Ging, Takdà, and Phubserang. The headquarters of the Company are in London; its local management is vested in the hands of a superintendent, with 5 European assistants. The total area held by the Company in 1872 was 8547 acres, of which 1300 acres were under plant. The number of labourers employed on the Company's gardens is, on an average, one to every acre of cultivated ground. This is the average for the year; a larger number of hands are employed during the manufacturing season, from March to November, and a smaller number during the months when no tea is made. The labourers are paid at the rate of about Rs. 3 (6s.) per month for children, up to Rs. 5 or Rs. 5. 8. 0 (10s. or 11s.) for able-bodied men. As a rule they are readily procurable; the majority are Nepálí immigrants, the remainder being made up of Lepchás, Bhutiás, and men from the plains. These people are encouraged to settle down permanently on the Company's gardens, by assigning to them small plots of land unsuited for tea, for the cultivation of cereal crops, such as maize, millet, etc. The out-turn of tea manufactured by the Company in 1870 amounted to 311,257 lbs. or 3794 standard *maunds*, from a total cultivated area of 1109 acres; average out-turn of tea per acre, 280 lbs. In 1872 the out-turn amounted to 471,325 lbs., or 5748 *maunds*, grown from 1300 acres, of which 1050 acres were under mature plants; average out-turn per acre of mature plants, 448 lbs. The Company's gardens are situated at elevations varying from 2000 to 4700 feet above sea level. The soil is generally good, and in some parts extremely rich.

The table on pp. 167–168, supplied by the Deputy-Commissioner, furnishes statistics for each of 56 gardens in 1870, showing the year in which the gardens were formed, the tenures under which the lands are held, the total area held and that under cultivation, together with the actual out-turn of tea for the years 1869 and 1870, etc.

During the four years following 1870, the tea industry in Dárjíling continued to develop in an even greater ratio than before, and by 1874 the number of plantations had increased from 56 to 113. The cultivated area rose in the same period from 11,046 acres to 18,888 acres, the out-turn from 1,689,186 lbs. to 3,927,911 lbs., and the number of labourers employed from 8347 to 19,424. The table on pp. 169–170 exhibits the detailed statistics of each garden for the

[*Sentence continued on page* 171.

Detailed Statistics of the Tea Gardens of Darjiling District for 1870.

Name of Proprietor.	No. of Gardens comprising the Estate.	Year in which the Gardens were established.	Acreage and Varieties of Tenure: Held in Grant under Old Rules.	Held in Fee-simple under New Rules.	Held under Rent-paying Cultivating Leases.	Total Area.	Total Acres under Cultivation at end of 1870.	Out-turn of Tea in 1869.	Out-turn of Tea in 1870.	Labourers: Men.	Women.	Children.	Total.
			acres.	*acres.*	*acres.*	*acres.*	*acres.*	*lbs.*	*lbs.*				
1. Dárjíling Company, Limited,	4	1860–4	7718½	...	646	8364½	1109	230,578	311,257	650	350	100	1100
2. Karsiáng and Dárjíling Company,	2	1856	...	680	2050	2730	719	69,200	69,760	77	141	43	261
3. Súm Tea Company,	1	1862	...	1252	...	1252	403	69,351	63,627	100	150	20	270
4. Indian Tea Company,	1	1861	600	...	...	600	450	3,360	2,160	120	80	30	230
5. Takvar Tea Company,	1	1860	574	...	...	574	574	76,947	101,520	200	150	50	400
6. Pankhábárí Tea Company,	1	1861	534	...	...	534	130	25,280	4 26,000	50	50	20	120
7. Lebong Tea Company,	3	1863	3499	319	210	5927	1066	194,880	272,720	420	405	133	958
8. Salim Tea Association,	1	1864	...	2039	...	2039	500	100,800	80,000	300	200	100	600
9. Land Mortgage Bank,	1	1856	...	1750	...	1750	500	50,000	57,926	200	100	40	340
10. Do.	1	1859	...	1150	...	1150	250	18,788	25,052	120	30	10	160
11. Do.	1	1862	...	1760	...	1760	250	16,164	25,152	115	30	5	150
12. Do.	1	1863	...	...	3154	3154	250	8,047	12,972	80	35	5	120
13. Do.	3	1862	1585	...	...	1585	490	62,810	86,887	224	140	26	390
14. Do.	1	1862	...	258	...	258	250	8,735	15,530	96	30	4	130
15. Dr. Brougham,	1	1859	...	3000	...	3000	550	64,480	84,000	200	90	40	330
16. W. C. Taylor,	1	1861	318	...	...	318	45	5,000	5,800	14	8	3	25
17. Estate of the late A. King,	1	1863	50	...	...	50	50	...	4,000	15	10	5	30
18. David Wilson,	1	1862	...	...	210	210	123	10,261	9,770	38	13	11	62
19. John Taylor,	1	1865	1526	100	...	1626	254	16,400	24,400	60	60	20	140
20. Benjamin Dickenson,	1	1867	700	...	...	700	109	7,101	13,440	53	13	2	68
21. John Stalkartt,	4	1861–9	694	...	1080	1774	148	7,048	15,955	107	46	23	176
22. Messrs. Collis, Miller, Blacker, and Partridge,	1	1860	1100	...	...	1100	834	112,000	147,200	260	250	50	560
Carried over,	33	...	18,898½	12,308	9249	40,455½	9054	1,157,230	1,455,128	3499	2381	740	6620

All the above are gardens situated in the hills.

DETAILED STATISTICS OF THE TEA GARDENS OF DARJILING DISTRICT FOR 1870—*continued.*

NAME OF PROPRIETOR.	No. of Gardens comprising the Estate.	Year in which the Gardens were established.	ACREAGE AND VARIETIES OF TENURE.				Total Acres under Cultivation at end of 1870.	Out-turn of Tea in 1869.	Out-turn of Tea in 1870.	LABOURERS.			
			Held in Grant under Old Rules.	Held in Fee-simple under New Rules.	Held under Rent-paying Cultivating Leases.	Total Area.				Men.	Women.	Children.	Total.
			acres	*acres*	*acres.*	*acres.*	*acres.*	*lbs.*	*lbs.*				
Brought forward, . .	33	...	18,898½	12,308	9,249	40,455½	9,054	1,157,230	1,455,128	3499	2381	740	6620
23. Thomas Stenhouse, ...	1	1864	228	...	...	228	200	13,930	13,930	40	30	20	90
24. Messrs. Rutherford, Blackwood, and Partridge, ...	1	1860	200	...	...	200	200	22,400	35,920	120	100	20	240
25. S. Mackintosh, ...	1	1860	...	80	...	80	50	4,000	5,280	18	10	2	30
26. C. H. Barnes, ...	1	1864	...	1,816	...	1,816	125	1,600	11,170	42	10	7	59
27. J. Stoelke, ...	1	1865	19	...	26	45	40	1,040	1,120	8	6	...	14
28. J. F. Muller, ...	1	1868	...	...	138	138	30	...	800	10	10	...	20
29. James Grant, ...	1	1860	516	...	...	516	160	6,800	26,400	60	30	25	115
30. Messrs. Daniel and Partridge, .	1	1863	...	...	1,007	1,007	120	2,560	10,880	49	24	10	83
31. — Tweedie, ...	1	1868	Not returned.				12	Not returned.		6	4	...	10
32. Messrs. Kennedy and Fleming, .	1	1869	156	...	...	156	12	...	49	7	3	...	10
33. C. R. O'Donoghue, ...	1	1868	...	...	450	450	30	...	...	5	11	...	16
34. Dárjíling Tarái Tea Company, .	1	1867–8	...	...	500	500	200	13,280	16,800	100	40	10	150
35. Tarái Tea Association, ...	1	1866	...	...	413	413	150	20,800	23,200	100	40	10	150
36. H. M. Harold, ...	2	1867	...	...	244	244	90	8,800	15,200	30	30	20	80
37. Messrs. Lloyd, Hill, and Flemstead,	1	1867	...	1,460	1,336	2,796	115	1,840	27,600	70	20	10	100
38. W. S. Paterson, ...	2	1866	2,188	...	...	2,188	137	5,240	11,800	100	40	...	140
39. H. Hancock, ...	1	1862–3	...	...	60	60	18	1,280	3,040	20	6	4	30
40. W. Lloyd and Others, ...	1	1867	...	...	60	60	50	69	69	30	10	5	45
41. R. S. Wight, ...	1	1862	...	...	75	75	75	7,200	7,200	60	40	20	120
42. Messrs. Mandelli and Martin, .	1	1866	...	...	311	311	70	10,800	20,560	50	40	10	100
43. W. Lloyd and Others, ...	1	1869	...	...	120	120	108	...	3,040	60	50	15	125
Total, ...	56	...	22,205½	15,664	13,989	51,858½	11,046	1,278,869	1,689,186	4484	2935	928	8347

Nos. 23 to 33 are gardens situated in the hills; 34 to 43 are in the *tarái*.

Detailed Statistics of the Tea Gardens of Darjiling District for 1872.

Name of Plantation or Proprietor.	No. of Gardens comprising the Estate.	Area.					Approximate Yield of Tea.				Average Yield in lbs. per Acre of Mature Plants.
		Area under Mature Plants in Acres.	Area under Immature Plants in Acres.	Total Cultivated Area in Acres.	Area of Uncultivated and Unsuitable Land in Acres.	Total Area in Acres.	Pekoe.	Pekoe-Souchong and Souchong.	Fannings and Broken Tea, etc.	Total Yield.	
							lbs.	*lbs.*	*lbs.*	*lbs.*	
1. Dárjíling Co., viz. Ging, Ambutiá, Takdà, and Phubserang,	4	1050	250	1300	7247	8547	226,000	180,000	65,325	471,325	448
2. Lebong Co., viz. Takvar, Badamtam, Little Badamtam, and Pankábárí,	4	910	147	1057	4693	5750	163,000	129,040	47,560	339,600	373
3. Takvar Company,	1	376	25	401	173	574	84,712	67,064	24,704	176,480	469
4. Dhuteria Estate, Dr. Brougham,	1	525	175	700	2327	3027	73,330	55,696	19,360	148,386	282
5. Súm Company,	1	350	5	355	897	1252	17,288	19,442	45,650	82,380	235
6. Land Mortgage Bank, viz. Mundakoti, Nagví, Nahor, Dukdobo, and Dajeá,	4	1250	50	1300	3663	4963	89,000	49,000	33,000	171,000	136
7. Land Mortgage Bank, viz. Minchu, Mineral Spring, and Changtang,	3	670	...	670	2675	3345	92,000	71,000	16,680	179,680	268
8. D. Wilson,	1	70	40	110	100	210	7,635	9,000	12,000	28,635	409
9. C. H. Barnes, Singtam,	1	80	120	200	1616	1816	8,102	10,790	13,054	31,946	399
10. C. H. Barnes, Pattabang,	1	...	80	80	349	429	...	...	...	...	...
11. Munshí Tárákolá,	1	30	...	30	248	278	2,995	2,371	874	6,240	208
12. C. R. O'Donoghue, Pattabang,	1	35	95	130	170	300	6,500	4,200	1,460	12,160	347
13. W. Lloyd, Lebong,	1	160	80	240	280	520	19,680	15,580	5,740	41,000	256
14. S. Mackintosh, Minchu,	½	45	5	50	...	50	1,040	4,320	817	6,177	137
15. H. Stoelke, Sternthal,	1	16	14	30	...	30	560	960	400	1,920	120
16. Estate, A. King, Hope-town,	1	50	...	50	...	50	2,419	1,915	706	5,040	100
17. W. C. Taylor, Hope-town,	1	40	10	50	268	318	3,000	1,960	...	4,960	124
18. J. Taylor, Margaret's Hope, Hope-town,	1	220	20	240	1386	1626	44,640	8,880	8,480	62,000	281
19. B. Dickenson, Rangmukh,	1	90	70	160	540	700	12,160	8,800	640	21,600	240
20. — Tweedie, Pachím,	1	...	50	50	130	180	210	600	...	810	...
21. — Flemming, Lakhia-moung,	1	10	50	60	96	156	720	720	36	1,476	147½
22. Mrs. Ward, Bavin's Hope,	1	1½	3½	5	45	50	108	104	4	216	144
23. J. F. Muller, Nagoí,	1	20	10	30	1392	1422	3,000	1,800	...	4,800	240
24. Karsiáng and Dárjíling Company, Makibárí and Alúbárí,	2	690	...	690	2040	2730	25,840	49,440	44,720	120,000	173
25. Estate of late T. Stenhouse, Springside,	1	150	50	200	28	228	28,800	22,800	9,200	60,800	405
26. Sengell and Kurbiá,	2	1000	...	1000	300	1300	141,120	125,440	47,040	313,600	313
Carry forward,	39	7838½	1349½	9188	30,663	39,851	1,053,859	840,922	397,450	2,292,231	...

DETAILED STATISTICS OF THE TEA GARDENS OF DARJILING DISTRICT FOR 1872—*continued.*

NAME OF PLANTATION OR PROPRIETOR.	No. of Gardens comprising the Estate.	AREA.					APPROXIMATE YIELD OF TEA.				Average Yield in lbs. per Acre of Mature Plants.
		Area under Mature Plants in Acres.	Area under Immature Plants in Acres.	Total Cultivated Area in Acres.	Area of Uncultivated and Unsuitable Land in Acres.	Total Area in Acres.	Pekoe.	Pekoe-Souchong and Souchong.	Faunings and Broken Tea, etc.	Total Yield.	
							lbs.	*lbs.*	*lbs.*	*lbs.*	
Brought forward,	39	7838½	1349½	9188	30,663	39,851	1,053,859	840,922	397,450	2,292,231	306
27. Tíndaríd,	1	120	80	200	807	1007	16,560	14,720	5,520	36,800	
28. Karsiáng and Tarái Company, Castleton and Morapur,	2	400	120	520	338	858	9,069	7,180	2,646	18,895	47
29. Panchai, Matigorá, and Rupan,	3	128	105	233	40	273	5,760	34,360	23,200	63,320	494
30. Pankhábárí Company,	1	130	...	130	404	534	22,068	19,616	7,356	49,040	377
31. Kálábárí,	1	50	50	100	144	244	13,320	11,840	4,440	29,600	592
32. P. Bertelson, Mohargaon,	1	120	50	170	2018	2188	10,400	27,700	13,000	51,100	425
33. R. S. Wight, Rúpráil and Champtá,	2	110	20	130	709	839	4,800	9,600	7,200	21,600	196
34. Follodhi,	1	135	...	135	5488½	5623½	14,000	17,000	2,780	33,780	250
35. Adalpur,	1	75	25	100	203	303	9,000	1,700	10,000	36,000	480
36. Central Tarái and Tárábárí,	2	150	210	360	2501	2861	4,000	8,000	5,600	17,600	117
37. Mandelli and Martin, Bismárí and Manja,	2	61	119	180	464	640	9,040	14,220	12,740	20,700	590
38. Selim Tea Association,	1	500	127	627	1412	2039	51,840	41,040	15,120	108,000	211
39. Dárjíling Tarái Company,	1	125	75	200	350	550	16,000	20,000	4,000	40,000	320
40. Tarái Tea Association,	1	100	100	200	213	413	14,400	11,520	22,080	48,000	480
41. Captain James, Ratandang,	1	50	30	80	201	281	5,040	4,480	1,680	11,200	224
42. C. H. Barnes, Southby,	1	...	100	100	134	234	....	...	...	...	...
43. — Thomas, Bálásan,	1	...	100	100	100	200	...	...	...	...	...
44. — Holloway, Tinihárá,	1	...	150	150	800	950	3,000	3,500	420	6,920	...
45. Messrs. Wernecke, Singiá,	1	...	60	60	680	740	...	...	...	...	...
46. Stoelke and Sinclair, Rishihot,	1	...	50	50	450	500	...	...	...	...	...
47. Indian Tarái Tea Company, Chenga,	1	...	220	220	617	837	...	...	...	...	...
48. — Makenzie, Narbang,	1	...	110	110	1009	1119	...	...	...	...	...
49. Gielle Tea Association,	1	...	100	100	234	334	...	...	...	...	...
50. Messrs. Kennedy,	1	...	200	200	604	804	...	...	...	...	...
51. New Tarái Tea Association,	1	...	400	400	2850	3250	...	...	...	...	...
52. Changtang, Tea Association,	1	...	40	40	460	500	...	...	...	560	280
53. — Holt, Maháldirám,	1	2	200	202	124	326	560	...	...	...	...
54. — Archer, Thealand,	1	...	40	40	30	70	...	...	...	53,280	873
55. J. Stalkartt, Forlorn Hope,	1	61	117	178	1800	1978	25,574	20,246	7,460		
Total,	74	10,155½	4347½	14,503	55,847½	70,346½	1,288,290	1,107,644	542,692	2,938,626	...

Sentence continued from page 166.]
year 1872, and the following paragraph summarizes the results of the industry in the District as a whole in 1873 and 1874.

STATISTICS OF 1873 AND 1874.—In 1873 and 1874 there was a particularly rapid development of the tea industry in Dárjíling. The following comparative statistics for these two years are quoted from the Bengal *Statistical Reporter* for November 1875: —'Among the results of the operations of 1874 in Dárjíling District, the most remarkable are the number of newly opened gardens, and the immense increase in the out-turn of those yielding tea. The returns of 1873 showed 87 gardens at the end of that year, while the number returned for 1874 is 113. There were, therefore, 26 new gardens opened during the year, or about as many as had been opened during the three preceding years. The total area shown as under cultivation at the end of 1874 was 18,888 acres, being 3193 acres more than the area returned for 1873, and 4385 acres more than the area returned as cultivated in 1872. The out-turn of 1874 was 3,927,911 lbs., as against 2,956,710 lbs. produced in 1873. The increase, therefore, was 971,201 lbs. This great increase is not merely due to an increase in the extent of land yielding tea for the first time, or coming into full bearing during the year. There can be no doubt that the average yield per acre throughout the District was much greater in 1874 than in former years. A comparison of the statistics of the last five years shows that in 1874 there were about 12,000 acres of plant yielding leaf. The average yield of an acre of the tea-producing plant was, therefore, about 325 lbs. But in 1872, the Deputy-Commissioner, in a note which he prepared on the subject, showed that the average yield of an acre of mature plant in Dárjíling was about 256 lbs.; while the average yield through all the tea-growing Districts then under the Government of Bengal was 237 lbs., the highest yield of any District being only 287 lbs. The average out-turn of an acre of Dárjíling tea during 1874 was therefore 69 lbs. more than it was in 1872, and 38 lbs. more than the average for that year of any other District. It is to be feared, however, that improvement in the quality of the tea manufactured has not kept pace with the increase in quantity. The average quality of the tea produced in Dárjíling in 1874 was inferior to that produced in some other Districts. It is believed that this evil has been recognised by many of the leading planters, and that we may look forward to successful

attempts being made for the improvement of Dárjíling tea. In 1874 there were 129 Europeans employed as managers or assistant-managers of tea gardens in Dárjíling, and under them there were 1373 natives in posts of trust or authority. The total number of labourers employed on all the gardens was 19,424, while the returns of 1873 showed only 14,019. This increase is very satisfactory; and though it is possible that it may have been due in some measure to the Behar scarcity, and therefore may be of a temporary character, still there is much reason to hope that this is not the case, and that it will be a permanent addition to our supply.'

It will be seen, therefore, that within the short space of nine years between 1866 and 1874, the number of gardens under tea has almost exactly trebled, and the area under tea cultivation has increased by 82 per cent.; while the out-turn of tea has multiplied itself nearly ten times.

METHOD OF TEA CULTIVATION.—The following brief account of the *modus operandi* of tea cultivation and manufacture in Dárjíling District is quoted from a letter of an anonymous correspondent to *The Field* newspaper, reprinted in the Bengal *Statistical Reporter* for December 1875. The writer states that his information is founded on personal observation and experience:—

'Having selected an advantageous site as regards soil, facilities of procuring labour and means of transport, a good lay of land, jungle that can readily be got rid of, water, and a healthy situation; and having made arrangements for the tea seed required for the year's planting, a temporary bungalow is erected of bamboos and grass, and a number of sheds run up for the coolies. Operations usually commence in October, at the close of the rainy season.

'Presuming that it is intended to make a plantation of 100 acres, some two or three hundred men, women, and children are set at work to cut down the jungle, probably composed of forest trees, and long, coarse tiger grass; the brushwood and undergrowth being cut first and the big grass later, so that when they fall they may lie on the underwood; the very heavy timber being ringed or barked, and left standing. After allowing sufficient time for the timber and grass to become thoroughly dry, the whole is set on fire, and any unconsumed logs of timber that are left are gathered together in a heap and fired again. Having burned the jungle, the coolies are set to work to dig out the small roots, and where that is done, the whole is dug some four or five inches deep. The land is then

staked off with bamboo stakes at distances of four feet apart, showing where the tea plants are to be. Holes of 18 inches by 1 foot in diameter are next dug at each of the stakes, in which the surface soil is placed. This work is generally all completed by the end of November. Three or four seeds are now placed in the soft soil of the holes, and pushed down to the depth of an inch.

'The garden being thus planted, attention is paid to erecting more substantial buildings, which generally consist of a bungalow for the manager, with stables, cook-house, and all necessary outbuildings attached, and a number of comfortable houses for the coolies. All that now remains to be done is to keep the garden quite free from weeds, and to fill up any vacancies that may occur from time to time from a nursery that is made when the plantation is first commenced. On new plantations the soil is so rich that manure is unnecessary, and only attracts insects which are likely to destroy the plant while young.

'When the tree arrives at maturity, it is with tea as with all other cultivations. It has been proved in England, and all countries where really high cultivation is followed out, that the higher the system pursued, the greater the profit. Deep hoeing is necessary from time to time between the lines of trees as weeds appear, while around the trees themselves careful hand-weeding goes on. The third year, all the plants should be from 4 to 5 feet in height; they are then pruned down to 20 inches, in order that the young leaves may be plucked readily, and also to promote the growth of new wood and tender shoots. Pruning has to be done in the cold weather, say between November and February, when the sap is down. The sooner after the sap goes down the better, for the sooner the tree will then "flush," or fling out new leaves in the spring. A month or six weeks after pruning, the new shoots are on an average from 6 to 8 inches high, and can now be picked; and from this period all through the rains, or for a space of eight months, successive "flushes" take place at intervals, varying from fifteen to twenty days, according to soil, degree of cultivation, moisture, and system of pruning adopted. The tea plant is said to "flush" when it throws out new shoots and leaves. A light cultivated garden should in its fifth or sixth year yield 500 lbs. of manufactured leaf per acre; and the out-turn should increase yearly till the plant in its twelfth year, when it has arrived at maturity, and should 900 lbs. per acre. Although it reaches maturity in twel

the plant has been known to yield just as freely at thirty years of age.

'PLUCKING AND MANUFACTURE.—As soon as the "flush" is in a sufficiently advanced state, as many hands as can be spared (the preference being given to women and children, on account of their gentler touch) are sent, provided with large baskets, to pluck the leaves. Tea can be made of the young tender leaves only; the younger and more succulent the leaf, the better tea it makes. As a rule, it is found too expensive to pluck the leaves separately, although the principle in plucking is to leave the bud at the axis of the leaf down to which it is plucked intact, and not destroy it by plucking the whole stem. The leaves are named as follows, from the teas they would make, supposing that there are six leaves on a shoot of the tree:—1, flowery Pekoe; 2, orange Pekoe; 3, Pekoe; 4, Souchong; 5, Congou; or mixed together—1, 2, 3, Pekoe; 1, 2, 3, 4, 5, Pekoe Souchong. If No. 6 be taken into account, it would make a coarse kind of Bohea.

'In the evening all the leaf-pluckers are called to the factory, where, after weighing the leaf in their respective baskets, it is spread lightly on bamboo mats or trays, tier above tier, to allow the leaf to wither. There are several tests to show when the leaf is withered. Fresh leaf gathered in the hand, and held near the ear, crackles, but no sound should be heard from withered leaf. The stalk of withered leaf will bend double without breaking; but fresh leaf stalks, if bent very little, will break. In dry weather, if there is any sun when it is brought in, the leaf is generally sufficiently withered by the morning; but should it not be ready, it is put out in the sun, or, if there is no sun, artificial withering is resorted to.

'When sufficiently withered to roll without breaking, a quantity of about 30 lbs. is given to each man, who rolls it on a strong wooden table (unless this is done by a steam rolling machine lately invented) covered with a fine bamboo mat, the slightly rough surface of which enables the leaf to roll better. As much leaf as can be conveniently held in both hands is taken by the men from the heap, and this they roll with a backward and forward motion till the leaf gets in a soft state, and when in the act of rolling it gives out juice freely. When rolled sufficiently, it is formed into tight-compressed

balls accumulated are allowed to stand until fermented. e most important point in the whole manufacture. The

fermentation should be stopped in the ball just at the right time, which practice alone enables one to do. As a rule, the inside of the ball should be of a rusty red colour. The fermentation is stopped by breaking the ball and spreading the leaf out on mats, and without delay putting it out in the sun. When it has become blackish in colour, it is again collected and re-spread, so that the whole of it should be affected by the sun. With bright sunshine, an hour, or even less, suns it sufficiently. It is then placed on trays above charcoal fires, where it is shaken up and re-spread several times until it is quite dry and crisp. Any piece then taken between the fingers should break with the slightest attempt to bend it. The manufacture is now completed: the roll has become tea. The tea has now to be sifted, and the various qualities separated. For this purpose, sieves of different meshes are used, the highest quality tea falling through the finer sieves, and the coarser tea through the larger sieves. All the red, hard, unrolled leaf is now fanned and picked out of the tea, and mixed with the Bohea. All the black teas, with the exception of Flowery Pekoe, are made in this manner. The manufacture of the latter is simple enough. When the leaves from each shoot are collected, they are exposed to the sun, spread out on mats, until they have well shrivelled. They are then placed over small and slow charcoal fires, and so roasted very slowly. If the above is well done, the Pekoe tips come out a whitish orange colour. The whiter they are the better. Flowery Pekoe is quite a fancy tea, and very seldom made.

'To make green tea, the leaf must be brought in twice in the day. What comes in at one o'clock is partly made the same day. The evening leaf is left till the following morning, laying it so thick that it will *not* wither. The leaf is then placed in hot iron pans over a small furnace, at a temperature of, say, 160°, and stirred with sticks for about seven minutes, until it becomes moist and sticky. It is then too hot to hold long in the hand. It is next rolled for two or three minutes on a table until it gets a little twisted, after which it is laid out on mats in the sun for about three hours, and rolled twice during that time, always in the sun. It is then again placed in the pans at the same heat as before, and worked with sticks until it becomes too hot to hold. It is then stuffed as tight as can be into canvas bags; the mouth of the bag is tied up, and the bag beaten with a flat, heavy stick to consolidate the mass, and so it is left for the night. Next morning it is taken out of the

bags and worked with sticks as before in the pans for nine hours without intermission. During this last process the green colour is produced, and the tea is made. The following are the kinds into which green tea is sorted:—1, ends; 2, young Hyson; 3, Hyson; 4, gunpowder; 5, dust; 6, imperial. The indigenous or hybrid plant makes the best black tea, and the plant produced from seed originally imported from China the best green tea.

'The tea is now, after another drying over charcoal fires, packed in boxes lined with lead, containing from 80 lbs. to 100 lbs. each, and sent down to the Calcutta market, where, as a rule, it is disposed of by public auction, and fetches from (according to quality) 1s. to 2s. per lb.'

CINCHONA.—The cinchona plantations in Dárjíling were commenced by Government about 1862, and have now attained a point which promises success. The chief plantation is at Rangbí, near the Station, in a long, narrow Himálayan valley. After more or less doubt and disappointment, the plantation began to thrive in 1867-68; and by 1875 there were about 2000 acres of Government cinchona plantations, in which the trees were from four to thirty feet high, according to their age. The total number of trees planted out between 1864 and 31st March 1875 (excluding those still in the nurseries) amounted to 3,285,592. The varieties of cinchona which flourish best are Cinchona saccirubra and C. calisaya, but as yet there is but little of the latter. There is also an experimental plantation at Nanklau, which consists mainly of C. officinalis, a species which had not been found to prosper at Rangbí.

The experimental cultivation of ipecacuanha has been attempted on the lower spurs near Dárjíling, and also on the level land below. The experiment is still in its infancy, but it promises well.

BOTANICAL GARDEN AT RANGARUN.—The following account of the Botanical Garden, which is now (1876) in process of being established in the neighbourhood of Dárjíling Station, is condensed from the *Supplement to the Calcutta Gazette* of 12th April 1876.

In a Minute by the Lieutenant-Governor of Bengal, dated 14th September 1875, it is stated that 'the time has come when a Botanical Garden should be established at or near Dárjíling, for the cultivation of plants, shrubs, and trees suitable to the soil and climate of the eastern Himálayas. Rich as are the hills around Dárjíling in many beautiful sorts of trees, they are yet destitute of one of the most remarkable natural orders of the Himálayan region, namely,

the Coniferæ,—the cedars, firs, pines, larches, spruces, cypresses, and others, which are such usual and striking objects in other parts of the mountainous country. The culture of these various and noble species has to a slight extent been commenced at Dárjíling, and will, I hope, be carried on perseveringly. The culture of many species of the Rhododendron genus, which are found in such magnificence in the higher parts of Dárjíling District and of the neighbouring State of Sikkim, is scarcely undertaken at all at Dárjíling, though it doubtless might be begun there under extraordinary advantages. The Erythrina, and other flowering trees and shrubs which already grow there, might be cultivated yet more extensively. The growth of a large tea industry in the surrounding Districts, the approach of the railway, the proximity of the cinchona plantations, the presence of the headquarters of the Forest Department of Bengal during several months in each year, and other material causes combine to afford encouragement for an undertaking of this description on the part of Government, and to promise the successful issue of such efforts as might be made for the advancement of practical science and for the public benefit.

'Thus many botanical experiments of much value might be, and ought to be, carried out in Dárjíling District, a locality so highly favoured by nature, if a good site were available. It is not, however, easy to find such a spot. After examining possible sites in various directions and at various altitudes in these hills, I arrive at the conclusion that the place known as the Rangárun Gardens affords quite the best site for the purposes above indicated. It is situated on a slope at the lower edge of the great forest which clothes the Sinchál mountain; its altitude of about 6000 feet, somewhat lower than that of Dárjíling (7000 feet), constitutes an advantage; its distance, six miles from Dárjíling, is convenient; it is easily accessible from the road between Dárjíling and the cinchona plantations at Rangbí; it has an excellent soil, watered during most months of the year by running streams; it has trees of the Coniferæ order, planted some years ago, and already flourishing. It is therefore proved by experiment to be well suited to one of the main objects of our botanical culture.'

In accordance with instructions contained in the Minute of the Lieutenant-Governor from which these quotations have been extracted, the buildings erected by the Cinchona Department, together with about 500 acres of land immediately adjoining, were reserved

by Government for botanical purposes, the whole having previously been Government property. Of this area, 423 acres, 1 rood, and 4 poles were included in the adjoining forest reserves, and placed under the Conservator of Forests. The remainder, which has been selected for the Botanical Garden, amounts to 47 acres, 1 rood, and 35 poles. For the repairs of the existing buildings, Rs. 2000 (£200) were allowed by the Lieutenant-Governor from 'Provincial Services;' and it was estimated that a further sum of Rs. 5000 (£500) was required to defray all the initial expenses connected with the formation of the garden. A grant for this latter sum was sanctioned from the balance to the credit of the Local Improvement Fund; and the annual cost of maintaining the garden is also to be met from local resources. The Botanical Garden is placed under the sole control of the Commissioner of the Division, by whom charges may be fixed for the admission of visitors, and for the sale of plants, etc. to individuals. The Commissioner, however, will exercise his control through the Deputy-Commissioner of Dárjíling District.

NEWSPAPERS.—Only one newspaper is published in the District—*The Dárjíling News*—with a circulation in 1871, as reported by the Deputy-Commissioner, of about 150 copies. This journal is printed in English, and is published mainly in the interests of the tea-planters. Attached to the newspaper is a branch press for ordinary printing in English. No vernacular printing presses exist in the District.

INCOME.—The net amount of income tax realized in Dárjíling District in 1870-71, under the provisions of the Income Tax Act of that year, by which a rate of $3\frac{1}{8}$ per cent. was levied on all incomes of £50 per annum and upwards, was £978, 6s. 0d. Allowing a fair margin for cost of collection, this would make up a total of about £40,000, as representing the whole of the incomes exceeding £50 a year. This, however, is no criterion of the income of the District, as much of the profits of manufacture were assessed elsewhere. Most of the tea companies, for instance, paid income tax in Calcutta, where their chief offices are situated. In the following year, 1871-72, the income tax was reduced to one-third of its former rate, and the minimum of incomes liable to assessment was raised to £75 per annum. In that year the net amount of income tax realized was £452, 14s. 0d.

REVENUE AND EXPENDITURE.—I have been furnished by the

Deputy-Commissioner with balance sheets of Dárjíling for the years 1840-41, 1850-51, and 1870-71. Owing, however, to successive changes in the area of the District since the transfer of the sanatarium by the Rájá of Sikkim in 1835, these tables are useless for comparative purposes; and as they also disclose omissions in certain points, the totals do not represent the total revenue and expenditure of the years to which they refer. The tables on p. 180 for the two earlier years are printed as furnished by the Deputy-Commissioner, materials not being available to fill up the omissions. The table for 1870-71, given on p. 181, I have endeavoured to make as accurate as possible by the addition of various items, such as police, jails, post office, education, etc., from the Departmental Reports for that year. In 1840-41, at the time when the District consisted merely of the tract ceded by the Rájá of Sikkim, corresponding to the limits of the present Municipality, the revenue was, according to the Deputy-Commissioner, only £472, 8s. od., while the expenditure amounted to £3115, 4s. od. In 1850-51, just after the annexation of the *tarái*, and of the remainder of the hills west of the Tístá as far as the eastern boundary of Nepál, the revenue was returned at £4295, 16s. od., and the expenditure at £6787, 4s. od. In 1870-71 the District as at present constituted, including the hill tract east of the Tístá annexed from Bhután at the close of the war of 1864, possessed a total revenue of £18,797, and an expenditure amounting to £23,869.

Land Revenue.—The land revenue of Dárjíling District is derived from various sources. In the *tarái* Sub-division, settlements in the ordinary way are made with the *jotdárs*. In the Hills Sub-division, the cultivators on Government *khás* lands in the old tract west of the Tístá pay a tax at the rate of Rs. 3 (6s.) per annum for each house, and 6 *ánnás* (9d.) for each bullock; in the forest reserves, the Forest Department charges at the rate of 8 *ánnás* (1s.) a month per house, from 1 to 4 *ánnás* (1½d. to 6d.) for a cow or bullock, and from 1½ to 6 *ánnás* (2¼d. to 9d.) for a buffalo. In the Dáling tract east of the Tístá, the cultivators pay a poll tax at the rate of Rs. 2. 8. 0 (5s.) per adult male, Rs. 2 (4s.) per adult female, and 6 *ánnás* (9d.) per head of cattle. Tea lands are either held under grants for 99 years at quit rents, or freehold under the Fee-Simple Rules of 1862, or under rent-paying cultivating leases for a term of 30 years.

In 1841, the first year for which records are available, the

[*Sentence continued on page* 182.

Balance Sheet of Darjiling District for 1840-41.

Revenue.		Expenditure.	
1. Land Revenue,	£0 0 0	1. General Department,	£2844 4 0
2. Stamps,	11 10 0	2. Post Office,	271 0 0
3. Law and Justice,	12 4 0		
4. Post Office,	314 8 0		
5. Political,	12 12 0		
6. Funds,	52 2 0		
7. Premiums, etc.,	61 0 0		
8. Miscellaneous,	8 12 0		
Total Revenue,	£472 8 0	Total Expenditure,	£3115 4 0

Balance Sheet of Darjiling District for 1850-51.

Revenue.		Expenditure.	
1. Land Revenue,	£2853 10 0	1. General Department,	£4265 8 0
2. Excise,	122 14 0	2. Post Office,	769 4 0
3. Stamps,	69 8 0	3. Interest,	48 18 0
4. Law and Justice,	98 12 0	4. Pension,	533 6 0
5. Police,	60 0 0		
6. Ferry,	1 0 0		
7. Post Office,	852 4 0		
8. Political,	238 8 0		
Total Revenue,	£4295 16 0	Total Expenditure,	£5616 16 0

Balance Sheet of Darjiling District for 1870-71.

Revenue.		Expenditure.	
1. Land Revenue,	£6,001 10 0	1. Land Revenue,[2]	£4,415 12 0
2. Excise,	1,478 16 0	2. Stamps,	41 0 0
3. Stamps,	1,359 12 0	3. Law and Justice,	69 18 0
4. Law and Justice,	203 12 0	4. Assessed Taxes,	52 18 0
5. Interest, Waste Lands,	334 4 0	5. Pensions,	900 0 0
6. Waste Lands Purchase Money,	171 18 0	6. Political,	60 0 0
7. *Income Tax (net),	978 6 0	7. Administration,	7 4 0
8. Registration,	56 8 0	8. Registration,	89 10 0
9. *Jail Manufactures,	10 0 6	9. *Police,	5,361 0 0
10. *Post Office,	1,543 18 3	10. *Jails,	648 11 6
11. Municipal Funds,[1]	6,640 10 0	11. *Education,	584 17 8
12. Local Funds,	18 8 0	12. *Post Office,	948 1 6
		13. *Medical and Vaccination,	2,310 0 0
		14. *Ecclesiastical,	960 0 0
		15. Municipal Funds,	6,699 10 0
		16. Local Funds,	721 12 0
Total Revenue,	£18,797 2 9	Total Expenditure,	£23,869 14 8

[1] These make up the receipts from the Improvement and Municipal Funds. The two funds, although separate, are not distinguished in the Deputy-Commissioner's office, but are entered under the one heading, 'Municipal Fund.'

[2] This item probably includes salaries of covenanted servants, and of subordinate judicial and executive officers.

* Items marked * are taken from the different Departmental Reports for 1870-71.

Sentence continued from page 179.]
number of estates borne on the District rent-roll was 23, owned by the same number of registered proprietors or co-parceners, paying a total land revenue of £115, or an average payment of Rs. 50 or £5 by each proprietor. By 1850, the number of estates had increased to 799, and the individual proprietors or co-parceners to 805; total land revenue, £2853, 10s. od.; average land revenue paid by each estate, Rs. 35. 11. 0 or £3, 11s. 5d.; average payment by each individual proprietor or co-parcener, Rs. 35. 7. 0 or £3, 10s. 10½d. In 1870-71, the total number of estates amounted to 931, held by 1109 individual proprietors or co-parceners; total land revenue, £6001, 10s. od.; average land revenue paid by each estate, Rs. 64. 8. 0 or £6, 9s. od.; average payment by each individual proprietor or co-parcener, Rs. 54. 1. 6 or £5, 8s. 2d.

JUDICIAL.—In 1839, and also in 1850, there was but one magisterial and one revenue and civil court in the District; in 1860 and in 1862 there were two magisterial and two civil and revenue courts; in 1869 there were four magisterial and seven civil and revenue courts; and in 1870, three magisterial and three civil and revenue courts. The number of covenanted European officers continuously stationed in the District was one in 1839 and 1850, two in 1860, and one in 1870.

POLICE PROTECTION has steadily increased. For 1840-41, the total force is returned to me by the Deputy-Commissioner as having consisted merely of 2 native officers and 12 footmen; and in 1860, prior to the constitution of the present regular police, as 16 native officers and 102 footmen. At the end of 1872, the regular police consisted of the following strength:—1 District Superintendent, maintained at a salary of Rs. 800 a month, or £960 a year; 3 subordinate officers on a salary of upwards of Rs. 100 a month, or £120 a year; and 32 officers on less than Rs. 100 a month, or £120 a year, maintained at a total cost of Rs. 1290 a month, or £1548 a year, equal to an average pay of Rs. 36. 13. 8 a month, or £44, 4s. 6d. a year; and 177 foot police constables, maintained at a total cost of Rs. 1496 a month, or £1795, 4s. od. a year, equal to an average pay of Rs. 8. 7. 3 a month, or £ 10, 2s. 10d. a year, for each man. The other expenses connected with the regular police are,—an average sum of Rs. 80 a month, or £96 a year, as travelling expenses for the District Superintendent; Rs. 127. 10. 8 a month, or £153, 4s. od. a year, for pay and travelling allowances of his office

establishment; and an average of Rs. 368 a month, or £441, 12s. od. a year, for contingencies and all other expenses. The total cost of the regular police of Dárjíling District in 1872 amounted to Rs. 4161. 10. 8 a month, or £4994 for the year, of which £4292 was paid out of Imperial, and £702 out of Municipal revenue. Total strength of the force, 213 men of all ranks. The area of Dárjíling District, as returned to me by the Boundary Commissioner, is 1234 square miles; and the population, as ascertained by the Census of 1872, is 94,712 souls. According to these figures, there is one policeman to every 5·79 square miles of the District area, and one to every 445 persons of the population. The cost of maintaining the force is equal to a charge of Rs. 40. 7. 6 or £4, os. 11¼d. per square mile of area, and to Rs. o. 8. 5 or 1s. o⅝d. per head of the population. No separate municipal force is maintained in Dárjíling District, the regular police performing also municipal duties, and a proportion of the cost being charged against the Municipality. In 1872 this proportion amounted to £702, or a fraction under one-seventh of the entire amount.

The Report of the Inspector-General of Police for the year 1872 returns only 5 rural police or village watchmen, maintained at an estimated total cost of Rs. 240, or £24. Each of these village watchmen had, on an average, the charge of 57 houses.

CRIMINAL STATISTICS.—During the year 1872, 406 'cognisable' cases were reported to the police, of which 54 were discovered to be false. Convictions were obtained in 146 cases, or 41·47 per cent. of the 'true' cases; the proportion of true cases being 1 to every 269 of the population, and the proportion of cases which resulted in convictions being 1 to every 648 of the population. Of 'non-cognisable' cases, 244 were instituted, in which 294 persons appeared before the court; of whom 95 or 32·31 per cent. were convicted, the proportion of persons convicted being 1 to every 996 of the population.

The following details of the number of cases and of convictions, etc., for different crimes and offences in 1872, are taken from the Report of the Inspector-General of Police for that year. The 'cognisable' cases were as follow:—Class I. Offences against State, public tranquillity, safety, and justice—Offences against public justice, 6 cases and 6 convictions, 7 persons tried and 6 convicted; rioting or unlawful assembly, 2 cases and 2 convictions, 19 persons tried and 17 convicted; personating public servant or soldier, 1

case but no conviction, 2 persons tried. Class II. Serious offences against the person—Murder, 1 case but no conviction, 2 persons tried; attempt at murder, 1 case, no conviction, 1 person tried; rape, 4 cases and 1 conviction, 3 persons tried and 1 convicted; attempt at or abetment of suicide, 1 case and 1 conviction, 1 person tried and convicted; grievous hurt, 3 cases, 2 persons tried, but no conviction; kidnapping or abduction, 2 cases, 2 persons tried, no conviction; criminal force to public servant or woman, or in attempt to commit theft or wrongfully confine, 5 cases and 1 conviction, 1 person tried and convicted. Class III. Serious offences against person and property, or against property only—*Dakáití* or gang robbery, 1 case, 12 persons tried, none convicted; robbery in dwelling-house, 1 case and 1 conviction, 1 person tried and convicted; robbery on the highway between sunset and sunrise, 1 case, 1 person tried, not convicted; other robberies, 1 case and 1 conviction, 2 persons tried and convicted; serious mischief and cognate offences, 12 cases, 3 persons tried, none convicted; lurking house-trespass or housebreaking with intent to commit an offence, or having made preparation for hurt, 4 cases and 2 convictions, 5 persons tried and 2 convicted. Class IV. Minor offences against the person—Wrongful restraint or confinement, 9 cases and 3 convictions, 10 persons tried and 5 convicted; doing a rash act causing hurt or endangering life, 1 case, 1 person tried, not convicted. Class V. Minor offences against property—Lurking house-trespass or housebreaking, 4 cases and 2 convictions, 3 persons tried and 2 convicted; theft of cattle, 25 cases and 5 convictions, 14 persons tried and 7 convicted; ordinary theft, 230 cases and 68 convictions, 155 persons tried and 105 convicted; criminal breach of trust, 15 cases and 1 conviction, 5 persons tried and 3 convicted; receiving stolen property, 4 cases and 3 convictions, 15 persons tried and 14 convicted; criminal house-trespass, 10 cases and 1 conviction, 10 persons tried and 4 convicted; breaking closed receptacle, 1 case and 1 conviction, 1 person tried and convicted. Class VI. Other offences not specified above—Vagrancy and bad character, 1 case, 1 person tried, not convicted; offences against religion, 1 case, no conviction; offences against the excise laws, 14 cases, 12 convictions, 19 persons tried and 15 convicted; public and local nuisances, 34 cases and 27 convictions, 37 persons tried and 32 convicted; other special and local laws cognisable by the police, 9 cases and 7 convictions, 12 persons tried and 11 convicted. The total number of persons

actually tried in 'cognisable' cases was 351, of whom 232 or 66·09 per cent. were convicted—228 summarily by the magistrate, and 4 by the Sessions Judge.

The number of cases instituted, and of persons tried and convicted in 'non-cognisable' cases during 1872 is returned as follows:—Class I. Offences against the State, public tranquillity, etc.—Offences against public justice, 1 case, 2 persons tried, and both convicted; offences by public servants, 5 cases, 9 persons tried, and 5 convicted; false evidence, false complaints and claims, 4 cases, 8 persons tried and 3 convicted; forgery or fraudulently using forged documents, 1 case, 2 persons tried, none convicted. Class II. Serious offences against the person—*nil.* Class III. Serious offences against property—Extortion, 1 case, 2 persons tried, none convicted. Class IV. Minor offences against the person—Hurt, number of cases not mentioned, 3 persons tried and all convicted; criminal force, 129 cases, 176 persons tried and 40 convicted. Class V. Minor offences against property—Cheating, 10 cases, 13 persons tried and 8 convicted; criminal misappropriation of property, 7 cases, 8 persons tried and all convicted; criminal breach of trust by public servants, bankers, etc., 2 cases, 2 persons tried and 1 convicted; simple mischief, 10 cases, 15 persons tried and 4 convicted. Class VI. Other offences not specified above—Offences relating to marriage, 27 cases, 5 persons tried and 1 convicted; defamation, 5 cases, 4 persons tried and 1 convicted; intimidation and insult, 9 cases, 10 persons tried and 3 convicted; public and local nuisances, 2 cases, 3 persons tried and 2 convicted; offences under chapter xviii., xx., xxi., and xxii. of the Criminal Procedure Code, 19 cases, 19 persons tried and 4 convicted; offences under chapter xv. of the Criminal Procedure Code, 5 cases, 5 persons tried and all convicted. Offences under special laws not cognisable by police—Cattle trespass, 2 cases, 3 persons tried, none convicted; relative to prostitutes, 5 cases, 5 persons tried and all convicted.

Excluding the 54 false cases, the total number of 'cognisable' and 'non-cognisable' cases investigated in Dárjíling District in 1872 was 596, in which 645 persons were tried, and 327 persons convicted; proportion of persons convicted to persons tried, 50·69 per cent., or one person convicted of an offence for every 289 of the District population.

JAIL STATISTICS.—There is only one jail in Dárjíling, namely, the District jail at the Station. The following statistics of the jail

population of Dárjíling District for the years 1857-58, 1860-61, and 1870, are compiled from a return specially prepared for me by the Inspector-General of Jails. The figures for the first two named years must be regarded with caution, and taken as only approximating to correctness. Owing to defects in the original returns which cannot now be remedied, prisoners in some cases appear to have been returned twice over. Since 1870, an improved form of preparing the returns has been introduced, and the figures for that year may be taken as absolutely correct.

In 1857-58, the first year for which materials are available, the daily average number of prisoners in the Dárjíling jail was 40, the total number of civil, criminal, and under-trial prisoners admitted during the year being 488. The discharges were as follow:—Transferred, 25; released, 453; died, 5; executed, 6: total, 489. In 1860-61, the jail returns show a daily average of 43 prisoners, the total number of prisoners admitted during the year being 390. The discharges were—Transferred, 5; released, 378; escaped, 2; died, 2: total, 387. In 1870, the daily average jail population was 61, the total number of prisoners admitted during the year being 227. The discharges were—Transferred, 6; released, 229; escaped, 2; died, 1; executed, 1: total, 239. With regard to the health of the jail, I gather that in 1857-58 the proportion of prisoners admitted into hospital amounted to 250 per cent., and the deaths to 12·50 per cent. of the average prison population; in 1860-61 the admissions into hospital amounted to 286·04 per cent., and the deaths to 4·65 per cent. of the daily average of prisoners; in 1870 the admissions into hospital fell to 57·37 per cent., and the death-rate to 1·64 per cent. of the average jail population.

The average cost of maintenance per prisoner in the Dárjíling jail, including rations, establishment, hospital charges, contingencies, and all other charges except the prison police guard (which is included in the general police budget of the District), amounted in 1857-58 to Rs. 64. 15. 7 or £6, 9s. 11d. per head; in 1860-61, to Rs. 64. 2. 11 or £6, 8s. 4d.; and in 1870, to Rs. 101. 2. 0 or £10, 2s. 3d. per head. The cost of the prison police guard in 1870 amounted to an average of Rs. 26. 15. 9 or £2, 13s. 11½d. per head, making a gross total charge to Government of Rs. 128. 1. 9 or £12, 16s. 2½d. per head. The Inspector-General of Jails, in his Report for 1870, returns the total cost of the Dárjíling jail, including police guard, repairs, etc., at £848, 17s. 6d. Excluding the cost

of the police guard, which is included in the general police budget of the District, the cost of the jail amounted to £648, 11s. 6d.

Prison industries have been carried on in the Dárjíling jail for a number of years past, but they have as yet contributed little or nothing towards the maintenance of the prisoners. In 1860-61 the receipts arising from the sale of jail manufactures amounted to £13, 9s. 3½d., and the charges to £4, 16s. od., leaving a surplus, or profit, of £8, 13s. 3½d.; average earning per prisoner engaged in manufactures, Rs. 8. 10. 7, or 17s. 4d. In 1870 the total credits arising from jail manufactures amounted to £328, 18s. 4d., and the total debits to £318, 17s. 9½d., leaving an excess of credits over debits, or a profit, of Rs. 100. 4. 3, or £10, os. 6½d.; estimated profit per prisoner engaged in manufactures, Rs. 16. 11. 4, or £1, 13s. 5d.

In 1872 the statistics of the jail were as follows:—The daily average number of civil prisoners in jail was 0·62; under-trial prisoners, 2·94; labouring convicts, 46·67; and non-labouring convicts, 1·33: total, 51·56, of whom 1·12 were females. These figures give one prisoner always in jail to every 1837 of the population. The deaths in 1872 amounted to 2, or 3·85 per cent. of the average prison population. The total cost of the jail in 1872, excluding public works and manufacture department, was £695, 4s. 2d., or an average of Rs. 133. 11. 1 or £13, 7s. 4½d. per head of the jail population. The Inspector-General of Jails states that this jail is necessarily a very expensive one, both because it is small, and because the cost of everything is greater in the hills. The results of prison industries during the year were as follow:—The total credits amounted to £202, os. 6d., and the debits to £279, 18s. 6d., leaving an excess of debits over credits, or a loss, for the year of £77, 18s. od. Out of the 46·67 labouring prisoners, 24·32 were employed in manufactures, the remainder being engaged in prison duties, or were in hospital, or were weak and old and unable to labour. The prisoners actually employed in remunerative labour were employed in gardening and stone-breaking.

EDUCATIONAL STATISTICS.—Education in Dárjíling District has hitherto been in a very backward state, and it is only within the last few years that any progress has been made at all. In 1856-57, and also in 1860-61, the only school in the District receiving Government aid was the English School at the Station, attended in the former year by 33, and in the latter year by only 16 pupils. In 1856-57 Government contributed £103, 16s. 8d., and in 1860-61, £67, 2s. od.

towards the expenses of this school; the amount realized by fees, etc. in the two years being only £3, 2s. 9d. and £1, 8s. 6d. respectively. In 1870-71 there were altogether 19 Government and aided schools in the District, attended by a total of 548 pupils; in this year the Government grant amounted to £601, 13s. 8d., and the fees, subscriptions, etc. to £660, 16s. 2d. The total expenditure on the Government and aided schools in 1870–71 amounted to £1250, 1s. 10d. The table on the two following pages exhibits the number and classification of th / schools in the District, the number and religion of the pupils, together with the amount of Government grant, fees, subscriptions, etc., and expenditure on each class of schools for the years 1856-57, 1860-61, and 1870-71. The most important educational establishment in the District is the St. Paul's School, an establishment of the Church of England for providing education for European and Eurasian children. In 1870-71 it contained a total of 38 pupils; the Government grant in aid amounted to £285, 12s. 0d., and the fees, subscriptions, etc., to £556, 16s. 0d. In the same year the 16 aided vernacular schools were attended by 428 pupils; amount of Government grant, £119, 5s. 8d.; fees, subscriptions, etc., £72, 18s. 5d.

Since 1871, there has been a considerable development both in the number of schools and in the attendance, as well as in the proportion of the cost borne by the public in the shape of fees, subscriptions, etc. At the end of 1872-73 there were altogether 29 schools in the District, namely, 1 higher-class English school —the St. Paul's School—3 middle schools, 23 lower schools, 1 normal, and 1 girls' school. These 29 schools were attended on the 31st March 1873 by 723 pupils, the monthly average for the year having been 788. The Government contribution for these schools amounted to £667, 10s. 7d., and the sum derived from fees, subscriptions, etc., to £1076, 3s. 6d., making a total of £1743, 14s. 1d. The total expenditure on the schools was £1735, 3s. 0d. The table on p. 191 exhibits the details of each class of schools for the year ending 31st March 1873.

The following paragraphs explanatory of the table on p. 191, as well as descriptive of the general state of education in Dárjíling District, are quoted in a somewhat condensed form from the Report of the Inspector of the Division, published in the General Report on Public Instruction in Bengal for 1872-73. The Inspector's

[*Sentence continued on page* 192.

Return of Schools in Darjiling District for the Years 1856–57, 1860–61, and 1870–71.

Classification of Schools.	Number of Schools.			Number of Pupils.											
				Hindus.			Muhammadans.			Others.			Total.		
	1856-57.	1860-61	1870-71.	1856-57.	1860-61.	1870-71.	1856-57	1860-61.	1870-71	1856-57.	1860-61.	1870-71	1856-57.	1860-61.	1870-71.
Government English School, ...	1	1	1	19	8	24	12	7	9	2	1	3	33	16	36
Aided English Schools,[1]	...	...	2	...	...	43	...	..	3	...	...	38	...	...	84
Aided Vernacular Schools,[2]	...	...	16	...	...	343	...	...	57	...	...	28	...	...	428
Total, ...	1	1	19	19	8	410	12	7	69	2	1	69	33	16	548

[1] One of these schools is the St. Paul's Church of England School for European and Eurasian children.
[2] Two schools of this class are returned as in Independent Sikkim, but they are virtually Dárjíling schools.

RETURN OF SCHOOLS IN DARJILING DISTRICT FOR THE YEARS 1856–57, 1860–61, AND 1870–71—*continued.*

CLASSIFICATION OF SCHOOLS.	RECEIPTS.						EXPENDITURE.		
	From Government.			Fees, Subscriptions, and Private Contributions.					
	1856-57.	1860-61.	1870-71.	1856-57.	1860-61.	1870-71.	1856-57.	1860-61.	1870-71.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Government English School, ...	103 16 8	67 2 0	180 0 0	3 2 9	1 8 6	11 17 9	106 19 5	68 10 6	191 17 9
Aided English Schools,	...	...	302 8 0	..	..	576 0 0	..	...	860 0 0[1]
Aided Vernacular Schools, ...	...	...	119 5 8	...	...	72 18 5	...	...	192 4 1
Total, . .	103 16 8	67 2 0	601 13 8	3 2 9	1 8 6	660 16 2	106 19 5	68 10 6	1250 1 10

[1] Of this sum £830, 0s. 0d. was on account of the St. Paul's Church of England School.

Return of Schools in Darjiling District for 1872–73.

Classification of Schools.	Number of Schools.	Number of Pupils.		Receipts.				Expenditure.
		Attendance on 31st March 1873.	Average Monthly Attendance.	Government.	Fees and Fines.	Other Sources.	Total Receipts.	
				£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1. Higher Aided English,	1	47	38	261 16 0	637 0 0	...	898 16 0	911 4 0
2. Middle Government English,	2	42	41	148 18 7	19 17 0	5 6 3	174 1 10	160 5 7
2. Middle Aided English,	1	21	23	16 16 0	0 14 2	25 14 10	43 5 0	36 2 2
Total,	3	63	64	165 14 7	20 11 2	31 1 1	217 6 10	196 7 9
3. Lower Aided Vernacular,	18	499	557	190 16 0	...	220 6 9	411 2 9	411 2 9
3. Lower Aided Vernacular—new *páthsálás*,	5	72	89	8 0 0	...	14 1 0	22 1 0	22 1 0
Total,	23	571	646	198 16 0	...	234 7 9	433 3 9	433 3 9
4. Normal School,	1	18	26	41 4 0	...	147 6 9	188 10 9	188 10 9
5. Girls' School,	1	24	14	...	...	5 16 9	5 16 9	5 16 9
Grand Total,	29	723	788	667 10 7	657 11 2	418 12 4	1743 14 1	1735 3 0

Sentence continued from page 188.]
Report is a summary of the information contained in the reports of the Deputy-Commissioner and of the Rev. Mr. Macfarlane of the Presbyterian Mission.

'AIDED HIGHER-CLASS SCHOOL.—St. Paul's School was started in Calcutta in 1845; its intention is to supply a good education at a moderate cost to the sons of Europeans and East Indians. The school was established by the Church of England, and was removed to Dárjíling from Calcutta in 1864. It receives a Government grant in aid of Rs. 238 a month (£285, 12s. od. a year). On the 31st March 1873 there were 47 pupils on the rolls, against 38 in the preceding year. The school is under the direction of a committee of gentlemen, all, or most of whom, are resident in Calcutta. The Deputy-Commissioner is of opinion that its popularity, and possibly its efficiency, might be increased if some persons of influence in Dárjíling were added to the list. The school sent up four candidates to the entrance examination of the Calcutta University, of whom only one passed. The head-master reports that the average attendance of pupils is not so large as might be expected, in consequence of many boys going to England at the age of 13 or 14.

'GOVERNMENT DISTRICT SCHOOL.—This had been a middle-class English school, but it was abolished. It was attended chiefly by the children of the native Government clerks and other Bengalís resident in Dárjíling, whereas it was the desire of Government to make the school attractive to boys belonging to the hill tribes; and ultimately it was split up into two, described by the Deputy-Commissioner as "one a boarding-school for Bhutiás and Lepchás, and the other an aided school of a nondescript character, mainly intended for Bengalís and Hindustánís." The old school-house has been made over to the boarding-school, together with a grant of Rs. 150 (£15) monthly. Out of this, the head-master receives Rs. 100 (£10) a month, and the remainder is supposed to be given in stipends of Rs. 5 (10s.) a month each to six boarders, besides providing for contingencies. At first two Lepchá boarders came, afterwards three Bhutiás, but it is doubtful if all five were ever at the school together. On the 31st March 1873 there were seven boys on the rolls, of whom four were Bhutiás and three Bengalís. These seven boys are reported to be in the primary stage of education, and it has been found impossible to prevent the Lepchá boys from running away whenever they please, on the plea chiefly that they wish to see their wives.

'MIDDLE-CLASS ENGLISH SCHOOL.—Rs. 40 (£4) a month of the original grant was set aside for an English school. One of the clerks in the Deputy-Commissioner's office gets Rs. 31 (£3, 2s. od.) a month for teaching the boys English for two hours a day; from this sum he pays an assistant Rs. 5 (10s.). The remaining Rs. 9 (18s.) goes for contingencies. A *munshí* is kept, who is paid from the fees, the rate of which varies, according to the circumstances of each boy, from Rs. 1. 3. 0 (2s. 4½d.) to 3 *ánnás* (4½d.), except in the Persian class, where all the students pay Rs. 1. 3. 0 (2s. 4½d.). The subjects taught in this school are English and Persian; and in the boarding-school English alone.

'AIDED MIDDLE ENGLISH SCHOOL.—There was a school of this class at Baghdokrá, which in March 1873 had 21 boys on its rolls. It received a Government grant of Rs. 14 (£1, 8s. od.), the requisite amount of local subscription being provided by the secretary of the school. Owing to this gentleman's death and the consequent cessation of his subscription, the school was closed subsequent to the end of the year under review. The Deputy-Commissioner writes as follows regarding this school:—"I need scarcely say that the standard of the school was not very high, but such as it was, it conferred a great benefit on the *jotdárs* of the *tarái*, a class of yeomen among whom I think it most desirable to encourage education of a somewhat higher kind than that given in primary schools. I regret, therefore, that the school is for the present closed. I am, however, trying to get some of the leading *jotdárs* in the neighbourhood to take up the work, and I hope that other Anglo-vernacular and middle schools of an unambitious character will be started during the next cold season."

'PRIMARY SCHOOLS.—All the primary schools in this District are at present under the Rev. Mr. Macfarlane of the Presbyterian Mission, who receives a monthly allowance of Rs. 175 (£17, 10s. od.), and in addition to this, a sum of Rs. 1200 (£120) has lately been made over to him from the *páthsálá* grant for the District. The balance of the grant is to be spent on schools in the *tarái*. Mr. Macfarlane had, before the close of the year under review, started 5 new *páthsálás* under the Government orders of the 30th September. On the 31st March he had altogether 25 schools (with 613 pupils on the rolls), one of which is a school for girls, and another a normal school. Of the 613 pupils, 557 were boys and 56 girls. Thirty-two girls were taught in the boys' schools; the remaining 24

were on the rolls of the separate girls' school. The languages taught in these schools are Bengalí, Hindí, Urdu in the Roman character, and Lepchá. The following are quotations from Mr. Macfarlane's report :—"All the schools established during the previous year were maintained during the past year, with the exception of the two *tarái* schools at Matígárh and Had-murí, which were transferred respectively to Hánskháwá and Ráníganj. Five new *páthsálás* have been established in the hills since the 30th September last,—three of them in the midst of tea plantations at Dhutiriá, Changtang, and Gell; one in the cinchona plantation at Mángphu; and one among the Lepchá villages at Sitang. Had it not been for scarcity of labour on the tea plantations, four more *páthsálás* would have been established. It is expected, however, that by the end of this year some ten more *páthsálás* will be established in the hills. The prejudices which the managers of the tea plantations at first had against schools are gradually disappearing, as they find that they are doing them no harm. . . . The boys in the *tarái* schools are far ahead of those in the hills, as regards the progress made in school. In fact, as regards education, the *tarái* seems to be very like the rest of the plains of Bengal. In the hills, everything—races, language, and condition of the people—is different. It is hard to say which of the two classes forming the mass of the hill population—the village agriculturists and the tea plantation coolies—presents the greater difficulty as regards education. Among the villagers, little Nepálí boys, almost as soon as they can distinguish between a goat and a sheep, are employed to look after their parents' flocks; and the teachers find it, as a rule, exceedingly hard work to collect half a dozen of them and keep them regularly at school. Again, on the tea plantations, from the end of March till the beginning of November, a little boy with scarcely strength enough to carry two or three *sers* on his back gets Rs. 3 (6s.) a month in wages, so that during that period the plantation schools are almost entirely deserted. . . . All that the hill people care for their boys to learn are the merest elements of reading, writing, and arithmetic. It is so easy to learn to read and write Hindí, that a sharp boy acquires a fair knowledge of both by the time he has gone through the Hindí primer. Accordingly we find that many boys, as soon as they have gone through the primer, consider their education finished. They can read and write to their own and their parents' satisfaction, and that is all they care for."

'GIRLS' SCHOOL.—There is only one girls' school in the District, and the existence of this is chiefly owing to Miss Macfarlane's energy and perseverance. The Nepálís, we are told, think the idea of educating girls quite absurd. "Some encouraging symptoms," writes Mr. Macfarlane, "have appeared, as a number of lads who were trained in the normal school have begun teaching their sisters since they became teachers."

'Mr. Macfarlane employs three sub inspectors in looking after the mission schools. One looks after the schools in the *tarái*, another inspects the schools round Dárjíling, and the third those round about Karsiáng.'

POSTAL STATISTICS.—A considerable increase has taken place in the use of the post office within the past few years. Between 1861-62, the earliest year for which trustworthy statistics are available, and 1870-71, the total number of letters, newspapers, parcels, and books has increased from 100,833 to 147,498, or by upwards of 46 per cent. The number of letters, etc. despatched from the District increased from 66,070 in 1861-62, to 94,311 in 1865-66. I have not been able to obtain a return of the letters, etc. despatched in 1870-71. The total postal receipts (exclusive of sale of postage stamps) has increased from £500, 8s. 2d. in 1861-62, to £1543, 18s. 3d. I have been unable to obtain any information as to the amount derived in any year from the sale of postage stamps. The postal expenditure amounted to £596, 17s. 0d. in 1861-62, and to £948, 1s. 6d. in 1870-71. The following table, exhibiting the postal statistics of the District for the years 1861-62, 1865-66, and 1870-71, is compiled from a return specially furnished to me by the Director-General of Post Offices:—

POSTAL STATISTICS FOR THE YEARS 1861-62, 1865-66, AND 1870-71.

	1861-62		1865-66		1870-71.	
	Received.	Despatched	Received	Despatched	Received	Despatched
Letters, ...	65,488	63,115	95,447	89,711	117,236	*Materials not received for this column.*
Newspapers, . .	31,125	2,374	22,955	2,698	24,852	
Parcels, ...	2,610	345	3,348	1,189	830	
Books, ...	1,610	236	2,728	713	4,580	
Total, . . .	100,833	66,070	124,478	94,311	147,498	
Receipts, exclusive of sale of postage stamps	£500 8 2		£731 6 0		£1543 18 3	
Expenditure, . .	596 17 0		787 11 6		948 1 6	

ADMINISTRATIVE DIVISIONS.—For administrative purposes, Dárjíling District is divided into the two following Subdivisions. The population figures are derived from statements 1 A and 1 B in the Appendix to the Census Report of 1872. The Administrative Statistics are taken from the special report furnished by the Collector in 1870–71:—

THE SADR OR HEADQUARTERS SUBDIVISION, comprising the whole of the hills portion of the District, contained in 1872 an area of 960 square miles, and a population of 46,727 souls, inhabiting 7753 houses. Out of the total subdivisional population, 29,129—namely, 17,569 males, and 11,560 females—or 62·3 per cent. were Hindus; proportion of males in the total Hindu population, 60·3 per cent. The Muhammadans numbered 754 males, and 273 females; total, 1027, or 2·2 per cent. of the subdivisional population; proportion of males in total Musalmán population, 73·4 per cent. The Buddhists returned in the Census tables numbered 791 males, and 577 females; total, 1368, or 2·9 per cent. of the subdivisional population; proportion of males in total Buddhists, 57·8 per cent. Christians—307 males, and 237 females; total, 544, or 1·2 per cent. of the subdivisional population; proportion of males in total Christians, 56·4 per cent. The remaining population, consisting of people belonging to 'other' denominations and not classified separately in the Census Report, is returned as numbering 7954 males, and 6705 females; total, 14,659, or 31·4 per cent. of the subdivisional population; proportion of males in total 'other' population, 54·3 per cent. Population of all religions, 27,375 males, and 19,352 females; total, 46,727. Proportion of males in total subdivisional population, 58·6 per cent.; average density of the population, 49 per square mile; average number of houses per square mile, 8; average number of persons per house, 6·0. The separate cost of maintaining the subdivisional courts and police force of 187 men in 1870-71 is returned by the Deputy-Commissioner at £5791, 2s. 0d.

THE TARAI SUBDIVISION contained in 1872 a total area of 274 square miles, and a population of 47,985 souls, inhabiting 11,111 houses. The Hindus numbered 21,612 males, and 19,090 females; total, 40,702, or 84·8 per cent. of the subdivisional population; proportion of males in total Hindus, 53·1 per cent. The Muhammadans numbered 2812 males, and 2409 females; total, 5221, or 10·9 per cent. of the subdivisional population; proportion of males in total Musalmán population, 53·9 per cent. The Christian population numbered 11 males and 1 female. Other denominations, males 1247,

and females 803; total, 2050, or 4·3 per cent. of the subdivisional population; proportion of males in total 'other' population, 60·8 per cent. Population of all religions, males 25,682, and females 22,303; total, 47,985; proportion of males in total subdivisional population, 53·5 per cent.; average density of the population, 175 per square mile; average number of houses per square mile, 41; average number of inmates per house, 4·3. The separate cost of maintaining the subdivisional courts and establishments, together with the police force of 30 men, in 1870-71, is returned by the Deputy-Commissioner at £1123.

METEOROLOGY.—The year may be divided into three seasons—winter from November to February, spring from March till the end of May, and summer or rainy season from June till the end of October. Dárjíling is one of the stations which have been selected to return special data to the Meteorological Department. The following paragraphs have been compiled from the Annual Reports of the Meteorological Department to the Government of Bengal for the years 1871 and 1872. The elevation of the Dárjíling station, which is situated on the spur of the ridge, is returned at 6941 feet. The Meteorological Department returns the following as the *day* highest maximum, lowest minimum, and mean monthly temperatures at this station, in the years 1871 and 1872:—In 1871—January, highest maximum, 62·0°; lowest minimum, 30·2°; monthly mean, 43·7°. February, max. 63·0°; min. 32·2°; mean, 46·1°. March, max. 72·0°; min. 32·2°; mean, 48·2°. April, max. 69·0°; min. 43·4°; mean, 55·9°. May, max. 73·0°; min. 43·4; mean, 58·8°. June, max. 78·0°; min. 55·2°; mean, 63·4°. July, max. 75·0°; min. 56·2°; mean, 63·1°. August, max. 73·0°; min. 57·2°; mean, 63·2. September, max. 76·0°; min. 52·2°; mean, 61·2°. October, max. 73·0°; min. 44·4°; mean, 58·4°. November, max. 64·0°; min. 39·2°; mean, 49·4°. December, max. 58·0°; min. 33·2°; mean, 43·9°. In 1872—January, max. 60·0°; min. 29·0°; mean, 42·5°. February, max. 61·0°; min. 29·0°; mean, 42·2°. March, max. 70·0°; min. 35·2°; mean, 53·5°. April, max. 71·0°; min. 41·2°; mean, 56·1°. May, max. 75·0°; min. 49·1°; mean, 59·9°. June, max. 74·0°; min. 55·2°; mean, 61·9°. July, max. 75·0°; min. 56·2°; mean, 63·0°. August, max. 74·0°; min. 57·2°; mean, 63·7°. September, max. 76·0°; min. 54·2°; mean, 61·5°. October, max. 70·0°; min. 45·0°; mean, 57·0°. November, max. 69·0°; min. 37·0°; mean, 51·8°. December, max. 67·0°; min. 34·0°; mean, 47·2°.

The following were the maximum, minimum, and mean readings of the *nocturnal* grass radiation thermometer in the same years :— In 1871—January, maximum, 34·0°; minimum, 27·0°; mean, 30·4°. February, max. 42·9°; min. 28·0°; mean, 35·8°. March, max. 41·0°; min. 28·0°; mean, 35·6°. April, max. 46·9°; min. 39·0°; mean, 42·8°. May, max. 54·8°; min. 40·0°; mean, 47·7°. June, max. 60·8°; min. 52·8°; mean, 55·8°. July, max. 58·8°; min. 51·8°; mean, 56·0°. August, max. 57·8°; min. 50·8°; mean, 55·0°. September, max. 53·8°; min. 48·9°; mean, 51·6°. October, max. 51·8°; min. 39·0°; mean, 44·0°. November, max. 41·9°; min. 35·0°; mean, 38·4°. December, max. 36·0°; min. 27·0°; mean, 31·6°. In 1872 — January, max. 35·0°; min. 24·0°; mean, 29·8°. February, max. 33·0°; min. 24·0°; mean, 29·0°. March, max. 45·9°; min. 30·0°; mean, 40·0°. April, max. 48·9°; min. 38·0°; mean, 43·5°. May, max. 53·8°; min. 43·9°; mean, 51·8°. June, max. 56·8°; min. 50·9°; mean, 54·5°. July, max. 57·8°; min. 50·9°; mean, 54·9°. August, max. 57·8°; min. 53·8°; mean, 55·5°. September, max. 54·8°; min. 50·9°; mean, 53·0°. October, max. 54·0°; min. 40·0°; mean, 45·5°. November, max. 45·0°; min. 33·0°; mean, 38·3°. December, max. 36·0°; min. 27·0°; mean, 33·2°. The following exhibits the monthly *mean* temperature at the Dárjíling observatory for the four years 1868-71 :—January, 42·9°; February, 44·5°; March, 50·4°; April, 56·1°; May, 60·2°; June, 63·3°; July, 63·9°; August, 64·0°; September, 62·1°; October, 58·0°; November, 50·2°; December, 44·0°. The averages of the monthly mean atmospheric pressures for the five years 1867–71 are as follows : —January, 23·334; February, 23·322; March, 23·311; April, 23·326; May, 23·273; June, 23·228; July, 23·224; August, 23·261; September, 23·322; October, 23·391; November, 23·424; December, 23·409; mean for the year, 23·320. The foregoing figures only refer, of course, to the observatory at Dárjíling, situated at an elevation of 6941 feet above sea level. I have no returns for the lower valleys, or for the *tarái* Subdivision. The temperature of the *tarái*, however, may be taken as practically the same as that of the adjacent District of Jalpáigurí.

The Dárjíling hills are noted for their great humidity : according to Dr. Hooker, 'Sikkim is the dampest region in the whole Himálayas.' The average annual rainfall, deduced from a series of observations extending over a period of from nine to twelve years, amounts to 126·96 inches. The monthly rainfall for the year 1871

is returned as follows :—January, *nil;* February, 0·78 inches; March, 2·72 inches; April, 3·18 inches; May, 8·18 inches; June, 16·83 inches; July, 34·94 inches; August, 24·38 inches; September, 24·57 inches; October, 0·70 inches; November, 0·72 inches; December, *nil;* total, 117 inches, or 9·96 inches below the average. The monthly rainfall in 1872 was—January, 0·36 inches; February, 0·50 inches; March, 1·14 inches; April, 4·36 inches; May, 3·70 inches; June, 20·54 inches; July, 30·57 inches; August, 21·21 inches; September, 14·52 inches; October, 10·56 inches; November and December, *nil;* total for the year, 107·46 inches, or 19·50 inches below the average. I have no rainfall returns for the *tarái.*

Dr. Hooker, in his *Himálayan Journals* (vol. ii. App. F. p. 403), states: 'Throughout the greater part of the year the prevailing wind is from the south-east, and comes laden with moisture from the Bay of Bengal. It rises at sunrise, and its vapours are early condensed on the forest of Sinchál; billowy clouds rapidly succeed small patches of vapour, which, rolling over to the north side of the mountain, are carried north-west over a broad intervening valley to Dárjíling. There they bank on the east side of the spur, and this being partially cleared of wood, the accumulation is slow and is always first upon the clumps of trees. Very generally by nine A.M. the whole eastern sky, from the top of Dárjíling ridge, is enveloped in a dense fog, while the whole western exposure enjoys sunshine for an hour or two later. At seven or eight A.M. very small patches are seen to collect on Tanglu, which gradually dilate and coalesce, but do not shroud the mountain for some hours, generally not before eleven A.M. or noon. Before that time, however, masses of mist have been rolling over Dárjíling ridge to the westward, gradually filling up the valleys, so that by noon or one P.M. every object is in cloud. Towards sunset it falls calm, when the mist rises from Sinchál, or if a south west wind sets in, from Tanglu first.'

DISEASES.—The Civil Surgeon reports that the higher elevations of the District may be almost pronounced free from endemic disease of any kind, except goitre, which is by no means wide-spread. In the *tarái,* however, and in the valleys with an altitude of 1000 feet downwards, malarious fevers, often of a very severe and fatal type, prevail. Of late years, the cultivation of tea on the lower elevations and in the *tarái,* by attracting a large number of Nepálí coolies, has led to a wider prevalence of malarious diseases and their sequelæ than formerly obtained; but there is no reason to

resemble those of the Tertiaries to the Dámodars, as indicated above, is what will naturally suggest itself. Strange as it may appear, however, that such metamorphic strata should normally overlie those in a less altered condition, the evidence seems to point to this conclusion.

'From Karsiáng to Dárjíling the gneiss is continuous, verging in some places towards mica-schist. The Dárjíling gneiss has, in fact, generally a great tendency to graduate into the latter lithological type. The dips are uncertain and irregular, with several local anticlinals and synclinals, but on the whole are northerly near Karsiáng, and southerly near Dárjíling. As we descend the spurs towards the Rammán, the slates are found again underlying towards the gneiss, but, in places at least, the boundary between the two series is a faulted one. The fault may be continuous, but I believe that the throw is not very great, and that it has merely complicated a line of junction along which the slate underlies the more metamorphic strata.

'If we follow the ill-marked and often indefinite boundary between the slates and gneiss down the valley of the Tístá, and thence back to Karsiáng and on to the Mechí river, we find that the underlie of the former is a constant feature. The same thing occurs east of the Tístá also. From the Jáldhaká, by Dáling, round to Damsáng, wherever I crossed from one series to the other, the inclination was towards the gneiss. The pre-tertiary rocks on both sides of the Tístá may be regarded as belonging to one rather shallow synclinal (including within itself many minor folds), the axis of which is somewhat raised near the river by a secondary anticlinal at right angles to the synclinal. The lower rocks are, in consequence of this elevation, brought to the surface, and are more fully exposed than they otherwise would be, on account of being cut through by the deep transverse valley of the Tístá. The elevation is not sufficient to bring the Dámodars to the surface along the valley; and these rocks are consequently only exposed along the southern edge of the synclinal, where they out-crop in a narrow band, varying from two or three hundred yards to about a mile in width, and extending from Pankhábárí nearly as far as Dálingkot. Here some faulting, combined with a change of strike, cuts them out, and the slates reach to the foot of the hills for several miles, but in the Machu the Dámodars are found again in their old position. Some beds occur near Baxá bearing a resemblance to the same formation;

but the neighbourhood of Dálingkot is the most easterly point at which indubitable Dámodars have been observed. Whether the coal-bearing series out-crops anywhere in Independent Sikkim is a question yet awaiting determination.

'There is a very large development in the Dwárs of variegated slates, which differ considerably in lithological character from those of Dárjíling District, and which, besides containing thick bands of quartzite, etc., include a band of dolomite not less than 1500 or 2000 feet thick. How far these two groups of slates may be distinct from each other is uncertain, but there are sufficient strongly marked points of difference to justify one in separating them, at least provisionally. I have accordingly applied the name of "Baxá" to one series, which is largely developed in the neighbourhood of that cantonment, and "Dáling" to the other, as it is well seen in the neighbourhood of the old Bhutiá fortress.

'The Tertiaries in the Dárjíling District, as along the Himálayas generally, occur as a narrow band fringing the base of the hills. The existence of gaps in this fringe near Dáling and west of the Torshá river is a most unusual phenomenon; in fact, these are the only instances as yet known in which the continuity of the Tertiary band is broken, from the Brahmaputra to the Indus.

'The alternating quartzites, dolomite, and slates of the Baxá series have had a marked influence in determining the erosion of the hill ranges in the Dwárs, where the two first rise into elevated ridges. In Dárjíling District these rocks are absent; there, while the several formations as wholes differ considerably from each other in hardness, the rocks composing any one formation are tolerably uniform in this respect. The gneiss is, as a whole, considerably harder than the slates, and the latter than the Tertiaries; but, excepting some not very important bands of quartzite in the slates, there is nowhere, on a sufficiently large scale to materially affect the orography, any alternation of strata of widely different hardness in the same formation. Hence, in as far as the orography has been influenced by the geological succession of rocks, it has been mainly so by the succession of formations or series, not of minor subdivisions. The lower Tístá valley has been excavated through the slates, the river, south of its junction with the Great Ranjít, having selected for its course the axis of the transverse anticlinal alluded to above. It seems not improbable that the Tístá between the Rángchu and the Ranjít, and the last-named river

below Gok, also flow along anticlinal axes; but the country to the north has not been examined.

'The gradation in hardness of the several formations, as we ascend from the plains, has also had a prominent influence on the elevation of the outer hills. If a view be obtained of these looking east or west, or parallel to the direction of the range, say from Pankhábárí across the Bálásan, to the hills between that stream and the Mechí, it will generally be found that those composed of Tertiaries seldom rise more than two thousand, and often not more than a few hundred feet. From the junction of the older rocks with the newer, the hills rise more quickly to the outer limit of the gneiss, from which they often spring rapidly to a total elevation of several thousand feet. Where the Tertiaries are absent between the Jáldhaká and Lángti rivers, and the gneiss comes closer than usual to the base of the hills, the latter rise at once to this altitude.'

ADDENDUM

TO THE

STATISTICAL ACCOUNT OF DARJILING.

THE ETHNOLOGY OF THE HILL RACES.

SINCE the sections referring to the population were printed, I have had an opportunity of comparing them with Mr. Brian H. Hodgson's *Papers on the Himálayan Races*. I regret that in several paragraphs I have not quoted from these most instructive essays instead of from the works or authorities cited in the text. A Collection of some of Mr. Hodgson's monographs, which appeared in India from 1841 to 1857, has lately been issued by Messrs. Trubner and Co., and I hope that others will in like manner be rendered available to English students. It will be seen from pp. 47 to 80 [TRIBES AND RACES], that the writers quoted by me derived most of their information from Mr. Hodgson's researches, and I should have avoided several obscurities if I had been in a position to invariably reproduce his results at first hand. I endeavour to partially remedy this defect by the following selections from Mr. Hodgson's *Essays*, as a supplement to the sections headed TRIBES AND RACES in my Account:—

'The Himálayan population is intensely tribal, and is susceptible of a threefold division of pregnant significance, and quite analogous to what holds true of the aboriginal Indian and Indo-Chinese populations, viz. *first*, into the dominant or unbroken tribes, such as the Khas, Magar, Gúrung, Néwár, Múrmí, Lepchá, Bodpa, etc.;

second, into the broken tribes, such as nearly all those termed Awalias,[1] as well as the Chépáng, Kusúnda, and Háyu or Vayu; *third*, into the tribes of helot craftsmen. The last are as follow:—

In the mountains of Nepal.	In the valley of Nepal.
Chunára, carpenters.	Po, executioners and workers in bamboo.
Sárki, curriers.	Kulu, curriers.
Kámi, blacksmiths.	Nay, butchers.
Sunar, gold and silver smiths.	Chamakhala, scavengers.
Gain, musicians.	Dong, Jugi, musicians.
Bhanr, ditto, but prostitute their women.	Kou, blacksmiths.
Damai, tailors.	Dhusi, metallurgists.
Agri, miners.	Awa, architects.
Kumhal or Kinari, potters.	Bali, agriculturists.
	Nou, barbers.
	Kuma, potters.
	Sangat, washermen.
	Tatti, makers of shrouds.
	Gatha, gardeners.
	Sawo, bleeders and suppliers of leeches.
	Chhipi, dyers.
	Sikami, carpenters.
	Dakami, house builders.
	Lohongkami, stone cutters.

'The position and affinities of the last, especially in the mountains, are still to me an enigma, as they were when I wrote on the Koch, Bodo, and Dhimál. As blacksmiths,[2] carpenters, curriers, etc., their services are, and ever have been, invaluable; yet they are degraded to the extent of being outcasts. Their manners have little, and their tongues nothing, and their physical attributes not much, to denote their race and lineage. Of the other two masses of the population, the unbroken tribes are clearly the more recent immigrants from the

[1] A list of Awalias:—1 Koch, 2 Bodo, 3 Dhimál, 4 Garo, 5 Dólkhali, 6 Batar or Bor, 7 Kudi, 8 Hájong, 9 Dhanuk, 10 Maraha, 11 Amát, 12 Kébrat, 13 Kíchak, 14 Palla, 15 Tháruh (not own name in Sallyan), 16 Bóksa (Kumaon), 17 Dahi or Darhi (allied to Bráhmu), 18 Thámi, 19 Pahi or Pahri (allied to Néwár and Múrmí), 20 Kumha (not own name), 21 Botia (allied to Kuswár), 22 Kuswár, 23 Denwar (allied to two last), 24 Bráhmu (allied to Dahi), 25 Váyu (not Awalias, but broken tribe), 26 Chépáng, and 27 Kusúnda (ditto).

[2] Of all the unbroken tribes, the Magar alone have their own miners and smiths. See and compare what is told of the old mines and miners of the Altai. See also a note in my work on the Koch, Bodo, and Dhimál.

north, and in general they are distinguished by languages of the simpler Turanian type; whereas the languages of the other or broken tribes are of the complex or pronomenalized type, tending, like their physical attributes, towards assimilation with the Dravidian and other non-Aryan sub-families of the sons of Túr. These broken tribes are demonstrated by their relative position to be of far older date, in the Himálaya as in Indo-China, and perhaps also in India, than the unbroken; and altogether, the phenomena of ethnology in the Himálaya warrant the conclusions that the Himálayas were peopled by successive swarms from the great Turanian hive, and that its tribes are still traceably akin alike to the Altaic branch of the north[1] and to the Dravidian and Mundarian of the south.[2] 'The Khas, Kanéts, and Dogras, and several others of the Western Himálaya, are clearly of mixed breed; aboriginal Tartars by the mother's side, but Aryans (Bráhman and Kshattriya) by the father's, as I have shown in my memoir on the military tribes of Népál (*Journal of the Asiatic Society of Bengal*, May 1833).'

'That the Sub-Himálayan races are all closely affiliated, and are all of northern origin, are facts long ago indicated by me,[3] and which seem to result with sufficient evidence from the comparative vocabularies now furnished. But to it lingual evidence in a more ample form will, however, in due time be added, as well as the evidence deducible from the physical attributes, and from the creeds, customs, and legends of these races. It must suffice at present to observe that the legends of the dominant races indicate a transit of the Himálaya from thirty-five to forty-five generations back—say 1000 to 1300 years, and that I prefer the remoter period, because the transit was certainly made before the Tibetans had adopted from India the religion and literature of Buddhism, in the seventh and eighth centuries of our era. This fact is as clearly impressed upon the crude dialects and cruder religious tenets[4] of the Himálayans

[1] For a sample of the Turkic affinities of the Kúswár tongue, see the volume of Mr. Hodgson's *Essays* (Trubner 1874), Part II. p. 62, and for one of the Dravidian affinities of the Kiránti tongue, p. 68.

[2] See paper on Nilgirians, J. A. S. B., and also two essays on the Vayu and Bahing tribes, in the same Journal (1857).

[3] Illustrations of the Languages, etc. of Nepál and Tibet, and Res. A. S. B., vol. xvi. 1827.

[4] Of these religious tenets, the full description given in my work on the Koch, Bodo, and Dhimál, may be accepted as generally applicable. The Bonpa faith of Tibet (the old creed of that country) and the Shamanism of Siberia are both

as their northern origin is upon their peculiar forms and features, provided these points be investigated with the requisite care; for superficial attention is apt to rest solely upon the Lamaism recently, as imperfectly, imported among them, and upon the merely exceptional traits of their mixed and varying physiognomy. That physiognomy exhibits, no doubt, generally and normally, the Scythic or Mongolian type (Blumenbach) of human kind, but the type is often much softened and modified, and even frequently passes into a near approach to the full Caucasian dignity of head and face, in the same perplexing manner that has been noticed in regard to the other branches of the Allophylian tree;[1] though among the Cis or Trans-Himálayans there is never seen any greater advance towards the Teutonic blond complexion, than such as consists in occasional ruddy moustaches and grey eyes among the men, and a good deal of occasional bloom upon the cheeks of the children and women. A pure white skin is unknown, and the tint is not much less decided than in the high caste Hindus; but *all* are of this pale brown or isabelline hue in Tibet and the Himálayas, whilst the many in the plains of India are much darker. The broken or depressed tribes above alluded to, passed the Himálaya at various periods, but all long antecedent to the immigration of the dominant tribes, and prior to the least whisper of tradition; and the lingual and physical traits of these broken tribes, as might be expected, constitutes several links of connection between the Altaic tribes on the north, and the Dravidian and Ho on the south. The description of the Himálayans, both of earlier and later immigration, is as follows:—Head and face very broad, usually widest between the cheek-bones, sometimes as wide between the angles of the jaws; forehead broad, but often narrowing upwards; chin defective; mouth large and salient, but the teeth vertical and the lips not tumid; gums, especially the upper, thickened remarkably; eyes wide apart, flush with the cheek, and more or less obliquely set in the head; nose pyramidal, sufficiently long and elevated, save at the base, where it is depressed so

more or less cultivated types of the primitive creed, subsequently largely adopted into Bráhmanism and Buddhism. The exorcist of the Múrmí or Tamar tribe is still called Bonpa, and every tribe's chief priestly agent is an exorcist, variously named.

[1] See Prichard, vol. iv. pp. 315, 344, 356, and Humboldt's *Asie Centrale*, 2. 62 and 133. Who could suppose the following description referred to a Scythic race?—'*Gens albo colore est atque pulchritudine et forma insignis.*'

as often to let the eyes run together, coarsely formed and thick, especially towards the end, and furnished with large round nostrils; hair of head, copious and straight; of the face and body, deficient; stature rather low, but muscular and strong. Character phlegmatic, and slow in intellect and feeling, but good-humoured, cheerful, and tractable, though somewhat impatient of continuous toil. Polyandry yet exists partially, but is falling out of use. Female chastity is little heeded before marriage, and drunkenness and dirtiness are much more frequent than in the plains. Crime is much rarer, however, and truth more regarded, and the character on the whole amiable. The customs and manners have nothing very remarkable, and the creed may be best described by negatives. Indifferency is the only, but heretofore effective, obstacle to indoctrination by Bráhmanical, Buddhist, or Christian teachers, so that the Scottish phrase, "We cannot be fashed," seems best to describe the prevalent feeling of the Himálayans on this, as on many other matters. The whole population is intensely tribal, some races still bound together by a common appellation—as the Kirántis, for example—being nevertheless divided into several septs, distinguished from each other by strongly marked dialects, non-intermarriage, and differences of customs, whilst the tribes which bear distinct names are still more palpably separated in those respects. But the barrier of caste, in the true sense, is unknown, and on the other hand there exists not in any tribe, race, or nation, any notion of a common human progenitor or eponymous deity.[1] The general status of all the tribes and races is that of nomadic cultivators. "*Arva in annos mutant et superest ager*" is as true now of the Himálayans as it was of our ancestors when they burst the barriers of the Roman Empire. A few tribes, such as the Néwár, have long become stationary cultivators; and the Gúrungs are still, for the most part, pastoral. There are no craftsmen, generally speaking, proper to these tribes, stranger and helot races, located among them for ages untold, being their smiths, carpenters, curriers, potters, etc., and the women of each tribe being its domestic weavers. The Néwárs alone have a literature, and that wholly exotic;[2] and they alone have made any

[1] The instance of the Gorkhalis, who undoubtedly derive their appellation from the demi-god Górakh (Goraksha) Náth, is only a seeming exception, recent and borrowed.

[2] For the literature and religion of the Newárs, see Part I. of Trubner's volume of Mr. Hodgson's *Essays* (1874).

attempts at the fine arts, in which they have followed chiefly Chinese, but also Indian, models.'

'The great rivers of the Himálayas descend from the snows in numerous feeders, which approach gradually and unite near the verge of the plains, thus forming a succession of deltaic basins, divided by the great snowy peaks as watersheds, thus:—

Basins.	Peaks.
1. Alpine Gangetic basin.	Nánda-dévi.
2. ,, Karnalic basin.	Dhavalagiri.
3. ,, Gandakean basin.	Gosain-thán.
4. ,, Kósian basin.	Kángchánjúngá.
5. ,, Tishtan basin.	Chumalhári.
6. ,, basin of the Mónas.	The Gemini, two unnamed peaks.

'In the two first of these six regions, all of which are plainly indicated by the distribution of the waters, the people are mongrel and mixed, save in the north-west parts, where the Palu Sen or cisnivean Bhótiás, the Garhwális, and the inhabitants of Kanáver and Hangrang are of Tibetan stock. The third, or Gandakean basin (Sapt Gandaki in native topography, from the seven chief feeders), is the seat of the Sunwárs, Gúrungs, and the Magars. The fourth, or Kósian basin (Sapt Cousika in native topography, after the seven chief feeders), is the abode of the Kiránti and Limbús. The fifth, or Tishtan basin, again, is the fatherland of the Deungjongmaro, and the sixth that of the Pru or Lhópá; that is,[1] Lepchás and Bhútiás, respectively. And, lastly, the high and level space (a system of valleys around the great one, which is nearly 5000 ft. above the sea) between the basins of the Gandak and Kósi is the seat of the Néwárs and Múrmís. But observe that the terms level space and system of valleys, applied to this last tract, are merely relative, though as such significant, nor meant to be contradictory of what has been above remarked, more generally, as to the whole Sub-Himálayas. The best representation of the Himálayas and Sub-Himálayas is by a comparison with the skeleton of the human frame,[2] in which the former are analogous to the spine

[1] Pru is the Lepchá name of the Bhútiás, whom the Hindu Shastras designate Plava, and themselves, Lhópá.

[2] Professor Müller (*apud* Bunsen's *Philosophy of Language*), grounding on my

and the latter to the ribs. The Sub-Himálayas, therefore, are transverse rather than parallel ridges, as above stated, or, at all events, their main ridges diverge more or less rectangularly from the *ghát* line, so as to unitize the several great streams, but still with an irregularity which close observance of the aqueous system can alone reveal. The ruggedness of the surface, by preventing all inter-communication of a free kind, has multiplied dialects: the rank pasture, by its ill effect on herds and flocks, has turned the people's attention more exclusively than in Tibet to agriculture, though even in Tibet the people are mostly non-nomadic;[1] heat and moisture, such as Tibet is utterly void of, have relaxed the tone of the muscles and deepened the hue of the skin, making the people grain-eaters and growers, rather than carnivorous tenders of flocks.

'The Cis-Himálayans are smaller, less muscular, and less fair than the Trans-Himálayans, but the differences are by no means so marked as might have been expected; and though there are noticeable shades of distinction in this respect between the several tribes of the Cis-Himálayans, according to their special affinities, as well as between most of them and the North-men, according to their earlier or later immigration, yet if they all be (as surely they are) of the same Turanian origin, it must be allowed that very striking differences of climate and of habits, operating through very many generations, can produce no obliterative effects upon the essential and distinctive signs of race. But this is, in part, speculation, and I will terminate it by remarking that, for the reasons above given, my investigations have been limited to that portion of the Sub-Himálayas which lies between the Káli and the Dhansri, or say 80½° to 92½° of east longitude and 26½° to 30½° of north latitude.'

'Though both the Gúrungs and Magars[2] still maintain their own vernacular tongues, Tartar faces, and careless manners, yet, what

Essay on the Physical Geography of the Himálaya, has likened the whole to the human hand with the fingers pointing towards India, The *ghát* line with its great peaks is assimilated to the knuckles, the dips between being the passes; and the three transverse Sub-Himálayan regions, extending from the *ghats* to the plains, are likened to the three joints of the fingers.

[1] Within the limits of Tibet are found abundance of nomades of Mongol and Turkish race, called respectively Sókpo and Hór by the Tibetans, who themselves seem much mixed with the latter race, which has long exercised a paramount influence in North Tibet: witness the facts that all its hill ranges are *taghs*, and all its lakes *núrs*, both Turki words.

[2] For these tribes see *Essay on the Military Tribes of Nepál*, in Part II. of Trubner's Reprint (1874).

with military service for several generations under the predominant Khas, and what with the commerce of Khas males with their females,[1] they have acquired the Khas language, though not to the oblivion of their own, and the Khas habits and sentiments, but with sundry reservations in favour with pristine liberty. As they have, however, with such grace as they could muster, submitted themselves to the ceremonial law of purity and to Bráhman supremacy, they have been adopted as Hindus. But partly owing to the licences above glanced at, and partly by reason of the necessity of distinctions of caste to Hinduism, they have been denied the thread, and constituted a doubtful order below it, and yet not Vaisya nor Sudra, but a something superior to both the latter—what I fancy it might puzzle the *Shastrís* to explain on Hindú principles.'

[1] Here, as in the cases of the Bráhman and Khas, and Kshattriya and Khas, there can be no marriage The offspring of a Khas with a Magarni or Gúrungni is a titular Khas and real Magar or Gúrung. The descendants fall into the rank of their mothers, and retain only the patronymic.

STATISTICAL ACCOUNT

OF

THE DISTRICT OF JALPAIGURI

STATISTICAL ACCOUNT

OF THE

DISTRICT OF JALPAIGURI.[1]

JALPAIGURI, a District of the combined Rájsháhí Kuch-Behar Commissionership or Division, is situated between 26° 0′ 35″ and 26° 59′ 30″ north latitude, and between 88° 22′ 40″ and 89° 55′ 20″ east longitude. It contains a total area, as returned by the Boundary Commissioner of Bengal in 1876, of 2905·64 square miles; and a total population returned at 418,048 souls. The principal town

[1] The principal official sources from which this Statistical Account has been compiled are as follow:—(1) Answers to my five series of questions, specially furnished to me by the District officers, and signed by Mr. F. Grant and Mr. W. O. A'Beckett (1870); (2) Summary of affairs in the Foreign Department of the Government of India, 1864–1869 (Calcutta); (3) Dr. Buchanan-Hamilton's MS. Statistical Survey of Rangpur District, conducted in 1809; (4) Report of the Forest Department of the Government of Bengal for 1871-72; (5) Bengal Census Report of 1872, by Mr. H. Beverley, C.S., with subsequent District Census Compilation, by Mr. C. F. Magrath, C.S.; (6) Report by the Deputy-Commissioner on the indigenous agency employed in taking the Census; (7) Note on the Land Tenures of the Dwárs prevailing under Bhutiá rule, by Mr. J. Tweedie, dated 11th September 1865; (8) Report on rates of Rent by the Deputy-Commissioner, dated 2d August 1872; (9) Reports of the Inspector-General of Police for 1870 and 1872; (10) Reports of the Inspector-General of Jails for 1870, 1872, and 1873; (11) Reports of the Director of Public Instruction for 1870-71, 1871-72, and 1872-73; (12) Postal Statistics for the years 1861-62, 1865-66, and 1870-71, compiled in the office of the Director-General of Post Offices; (13) Reports of the Meteorological Department for 1871 and 1872; (14) Medical Reports furnished to me by the Civil Surgeon of the District, and by the surgeon in medical charge of the native infantry regiment stationed at Baxá; (15) Report on the Charitable Dispensaries of Bengal for 1872; (16) Statement of areas, latitudes, and longitudes, furnished by the Surveyor-General and Boundary Commissioner; (17) *The Statistical Reporter*, November 1875 to May 1876.

—indeed the only place in the District which may be called a town —and the administrative headquarters of the District, is Jalpáigurí, situated on the west or right bank of the Tístá (Trisrotá) river, in 26° 32′ 20″ north latitude, and 88° 45′ 38″ east longitude. Jalpáigurí is also a military station, a regiment of native infantry being quartered there. A small stream, called the Kharlá, separates the cantonments from the town and Civil Station.

BOUNDARIES.—The present District of Jalpáigurí—consisting of the Western Bhután Dwárs, annexed at the termination of the war with Bhután in 1865, and the police circles (*thánás*) of Fakírganj, Bodá, Sanyásíkátá or Silígurí, and Pátgrám, separated from Rangpur District in 1869 and 1870—is bounded on the north by the District of Dárjíling and the Independent State of Bhután; on the east by the Eastern Bhután Dwárs, now incorporated with the Assam District of Goálpárá, the Sankos river marking the boundary-line between the Eastern and the Western Dwárs, and by the protected State of Kuch Behar; on the south by the State of Kuch Behar and the District of Rangpur; and on the west by the Districts of Dinájpur, Purniah, and Dárjíling, the Mahánandá river marking the boundary-line for some distance.

JURISDICTION.—Although the District is of very recent creation, several important changes have taken place in its boundaries and jurisdictions. At the close of the Bhután war in November 1864, the British retained possession of the low, fertile strip of country lying along the base of the Bhután hills, together with the mountainous tract of Dálingkot. The country so annexed was formed into the two Districts of the Eastern and the Western Dwárs, of which the former has been since incorporated with the Assam District of Goálpárá. The Western Dwárs, after its annexation, was divided into three Subdivisions; namely, the *Sadr*, or principal Subdivision, comprising the tract of land between the Tístá and the Torshá rivers, with its headquarters at Mainágurí; (2) the Baxá Subdivision, extending from the Torshá to the Sankos river, and bordering on the Eastern Dwárs, with its headquarters at Alípur; and (3) the Dálingkot Subdivision, co-extensive with the mountainous tract of the annexed territory. From the 1st January 1867, the Dálingkot Subdivision was transferred to Dárjíling District; and at the same time, the criminal jurisdiction of the three police circles (*thánás*) of Bodá, Sanyásíkátá, and Fakírganj, comprising the Titályá Sub-
ion of the District of Rangpur, was handed over to the Deputy-

Commissioner of the Western Dwárs, the civil and revenue jurisdiction being retained in Rangpur as before. This arrangement continued till the 1st January 1869, when a readjustment was made, by which the Titályá Subdivision was altogether separated from Rangpur (with the exception of the civil jurisdiction), and incorporated with the Western Dwárs, the whole being formed into the new District of Jalpáigurí, with its headquarters at Jalpáigurí town, on the right or west bank of the Tístá river. At the same time, that part of the Western Dwárs lying east of the Jáldhaká river was formed into the Phálákátá Subdivision; and the headquarters were removed to Phálákátá, a place about twenty-four miles west of Alípur, the former headquarters of the Baxá Subdivision. That part of the Dwárs to the west of the Jáldhaká, between that river and the Tístá, was attached to the Jalpáigurí or principal Subdivision. Although the criminal and revenue jurisdictions of the Titályá Subdivision had been made over to Jalpáigurí in January 1867, the civil jurisdiction remained with Rangpur, and was only finally attached to Jalpáigurí on the 1st April 1870. At the same time, the police circle (*tháná*) of Pátgrám was also transferred from Rangpur to the Phálákátá Subdivision of Jalpáigurí.

The Jalpáigurí or Headquarters Subdivision, which prior to 1869 formed a portion of Rangpur District, is settled with the *zamíndárs* under the provisions of the Permanent Settlement Regulation of 1793; while the Dwárs or Phálákátá Subdivision, annexed from Bhután in 1864, is under direct Government management (*khás*), temporary settlements being made with the actual cultivators of the soil. The Deputy-Commissioner of the District has his headquarters at Jalpáigurí town, where there is also stationed a Deputy-Magistrate, District Superintendent of Police, Subordinate Civil Judge, and Assistant Conservator of Forests. An extra Assistant Commissioner is stationed at the Subdivisional town of Phálákátá. A regiment of native infantry is in cantonments at Baxá, a military post in the north of the Phálákátá Subdivision, in the outer Bhután hills. Another regiment or detachment of native infantry is also posted at Jalpáigurí town.

The limits of the revenue, magisterial, and civil jurisdictions are now all coincident, with the exception that, in the Western Dwárs or Phálákátá Subdivision, it has been found advisable to remove certain classes of cases affecting the land from the jurisdiction of the ordinary Civil Courts. Sections 2 and 3 of Act xvi. of 1869

enact that 'the jurisdiction which the ordinary Civil Courts of judicature have hitherto had and exercised in respect of suits and other matters connected with immoveable property, revenue, and rent, in the said territory (the Bhután Dwárs), shall cease. Such jurisdiction shall be exercised by such officers, and within such local limits, as the Lieutenant-Governor of Bengal shall from time to time appoint in this behalf.' The procedure to be adopted under this Act, in cases relating to immoveable property, rent, and revenue, in the Dwárs, was laid down by a schedule of rules as follows:— In the first place, before the special officer commenced his inquiries in any particular tract of country, due notice was to be given to all persons in the said tract interested in such suits to come forward and advance their claims. In his investigations, the officer was to be guided by the provision of Regulation vii. of 1822,—'A Regulation for declaring the principles according to which the Settlement of the Land Revenue in the Ceded and Conquered Provinces is to be hereafter made,' etc.,—and was vested with all the powers conferred upon a Collector by this or any subsequent amending Regulation or Act, in addition to the powers vested in him by the schedule of rules attached to Act xvi. of 1869. The special duty of the officer was to ascertain the position as to rights and interests connected with the soil which each person *bonâ fide* occupied before the state of things was affected by the Bhután war, and to confirm him in that position; provided that he was not to take cognisance of any right or interest which had not been exercised or asserted for twelve years before the date in which the Bhután Dwárs were transferred to the British Government. A record was to be preserved of all rights and interests, and duly published in the tract. An appeal from the officer's decision lay to the Commissioner of the Division, provided it was made within a period of three months from the passing of such decision or order.

Early History and Acquisition of the Bhutan Dwars.—It has been already stated that a portion of what is now Jalpáiguri District became British territory as the result of the Bhután war in 1864-65. It may be as well, therefore, in this place, to give a brief historical sketch of the relations between our Government and the Bhutiás, which ultimately led to the extension of the British frontier in this direction.

Bhután formerly belonged to a tribe called by the present Bhutiás Tephu, who are generally believed to have been the people of Kuch

Behar. About two hundred years ago, it is said, some Thibetán soldiers subjugated the Tephus, and took permanent possession of the country. There are nominally two supreme authorities at the head of the Bhután Government,—the Dharm Rájá, or spiritual chief, and the Deb Rájá, or temporal ruler. To aid these Rájás in administering the country, there is a council of permanent ministers, called the Lenehen. Practically, however, there is no government at all. Subordinate officers and rapacious governors of forts wield all the power of the State, and tyranny and oppression prevail throughout the country. The Dharm Rájá succeeds as an incarnation of the deity. On the death of a Dharm Rájá, a year or two is allowed to elapse, when the new incarnation appears in the shape of a child, who generally happens to be born in the family of one of the principal officers of the State. The child establishes his identity by recognising the cooking utensils, etc. of the late Dharm Rájá; he is then trained in a monastery, and on attaining a suitable age is recognised as Rájá, though he exercises no more real authority after his majority than he did before. The Deb Rájá, or temporal ruler, is in theory elected by the council. In practice, however, he is merely the nominee of whichever of the two governors of East and West Bhután happens for the time being to be the more powerful.

The relations of the British Government with Bhután commenced in 1772, when the Bhutiás invaded the principality of Kuch Behar, a dependency of Bengal. The Kuch Behar Rájá applied for aid; a force was despatched to his assistance, and the invaders were expelled and pursued into their own territories. Upon the intercession of the regent of Thibet, a treaty of peace between the East India Company and the Bhután Government was concluded in 1774. In 1783, Captain Turner was deputed to Bhután, with a view of promoting commercial intercourse, but his mission proved unsuccessful. From this period, little intercourse took place until the occupation of Assam by the English in 1826. It was then discovered that the Bhutiás had usurped several tracts of low land lying at the foot of the mountains, called the Dwárs or passes, and for these they agreed to pay a small tribute. They failed to do so, however, and availed themselves of the command of the passes to commit depredations within British territory. Captain Pemberton was accordingly deputed to Bhután to adjust the points of difference. But his negotiations yielded no definite result; and every other

means of obtaining redress and security proving unsuccessful, the Assam Dwárs were wrested from the Bhutiás, and the British Government covenanted to pay £1000 per annum to Bhután, during good behaviour, as compensation for the loss. Continued outrages and aggressions were, however, committed by the Bhutiás on British subjects in the Dwárs. Notwithstanding repeated remonstrances and threats, scarcely a year passed without the occurrence of several raids on British territory, headed by Bhutiá officials, in which they plundered the inhabitants, massacred them, or carried them off as slaves. The following paragraphs, descriptive of the Bhután campaign and the annexation of the Dwárs, are quoted in a slightly condensed form from the official account published in the 'Summary of Affairs in the Foreign Department of the Government of India, from 1864 to 1869':—

'In the cold weather of 1863, Mr. Ashley Eden, C.S., was sent as an envoy to Bhután, to put a stop to these depredations and outrages, and to demand reparation. In April 1864, Mr. Eden returned from Bhután and reported the ill-success of his mission. He had failed to obtain from the Government of Bhután either satisfaction for past injuries or security for the future. He had been subjected to gross insults, and obliged by force to sign two papers, agreeing to make over the Assam and Bengal Dwárs to Bhután, and to surrender all runaway slaves and political offenders. It appeared that the Deb and Dharm Rájás were in reality mere puppets, and that the chief power in the State had been usurped by Tongso Penlo; and that it was Tongso Penlo and his faction who had treated the envoy with indignity. On Mr. Eden's return, the Government at once disavowed the treaty which he had been forced to sign, suspended all communications with the Bhután Government, and strengthened the police force on the frontier. In June, the Government addressed letters to the Deb and Dharm Rájás, permanently annexing the District of Ambárí Phálákátá (the Bengal Dwárs), and declaring that the annual payments previously made by the British Government to Bhután, of £200 as rent for Ambárí Phálákátá, and of £1000 as revenue from the Assam Dwárs, had ceased for ever. The letter demanded also the release of all British subjects, as well as subjects of Kuch Behar and Sikkim, numbering in all, it was said, more than three hundred persons, who had been detained in Bhután against their will; and the restoration of all property which had been carried off from British territory, or Kuch

Behar or Sikkim, within the previous five years. The letter concluded by stating that, unless these demands were fully met by the commencement of the ensuing September, further measures would be taken to enforce them. To these demands, the Deb Rájá, in whose name all official communications from the Bhután Government were usually made, sent no reply whatever. In August, however, a letter was received from the Dharm Rájá, offering no apologies for the gross insults offered to the envoy, and altogether ignoring the Government's threat of coercion, but proposing to receive a fresh envoy or to send one himself. This proposition was considered to be out of the question. If the Dharm Rájá had manifested any intention of liberating the captives or of restoring the plundered property, the proposal to receive an envoy from Bhután might have been entertained; but as it was, the action of the Bhután authorities left no option to the British Government but to enforce its demands, and to compel the Bhutiás to respect the frontier for the future.

'Accordingly, it was resolved to carry out the permanent annexation of the Bengal Dwárs, amounting to an advance northward for a distance of from twenty to thirty miles along a line of about a hundred and eighty miles in length, so as to command all the passes into the plains; and at the same time to confine our occupation to a tract of country which was peopled by a race who had no affinity with the Bhutiás, and had long suffered from their tyranny, but who were closely allied with the people of Bengal, and were expected to co-operate cordially with the British authorities. On the 12th November 1864, Government issued a proclamation permanently annexing the Bengal Dwárs; and it was determined that an expedition should advance in four columns, and take up their several posts at Díwángirí, Sidlí, Pasakhá, and Dálingkot. Instructions were also issued that no overtures from the Bhután Government were to be taken into consideration, except upon the following basis:—(1) That the Bhután Government surrender all the Bengal Dwárs and the hill territory on the left bank of the Tístá, up to such points on the watershed lower range of hills as might be laid down by the British Commissioner. (2) That the Bhutiás give up the two documents extorted from Mr. Eden, and send a chief of rank to apologize for the flagrant misconduct towards the envoy. (3) The surrender of all captives still detained in Bhután against their will. (4) That the Bhután Government enter into a treaty of friendship and fair dealing for the future. In the event of these conditions

being accepted, the British Government offered an annual grant of £2500, to be hereafter increased, with reference to the prosperity of the tract annexed, up to the sum of £5000; but this grant was to depend entirely on the will and pleasure of the British Government, and on the good conduct of the Bhutiás.

'On the 7th December 1864, the four columns made a simultaneous advance; within six weeks they had driven in the Bhutiás with but slight loss, and occupied eight or ten of their posts along a frontier of about a hundred and eighty miles of difficult and jungly heights. Subsequent to these successes, the civil authorities set to work to introduce rule and order into the Dwárs, to implant confidence in the minds of the inhabitants, and to arrange generally for the administration of the newly annexed territory. They also concerted measures in communication with the military authorities for establishing a strict blockade of the passes, with the object, by cutting off their supplies, of inducing the Bhutiás to come to terms.

'Meantime, in the beginning of 1865, the Bhutiás appear to have resolved on a bold effort to recover the territory they had lost, and to drive the invaders from their country. They suddenly debouched in force along the frontier, threatening the whole line of military posts, excepting the western one at Dálingkot. On 4th February 1865, the Bhutiás so far succeeded in their design as to capture the eastern post at Díwángirí. This was the more surprising, as the garrison at Díwángirí had repelled a far more formidable attack which had been made on the 30th January. However, on the second occasion the garrison abandoned its position with the loss of two mountain train guns, and during its retreat was almost entirely unmolested by the enemy. At one other post, Tájágáon, which was apparently untenable, the commanding officer found it necessary to retire, and did so in perfect order. At all the other posts the garrisons held their own, although threatened in force by the Bhutiás. On the 15th March General Tytler reoccupied the position at Tájágáon, and on the 2d April General Tombs recaptured Díwángirí. With these two affairs all active operations ceased. The Bhutiás lost heart, and made no further efforts to regain their ground, or to molest the force which had taken possession of the Dwárs and their forts. Active hostilities were brought to a close by the setting in of the rains, and the Bhután authorities evinced an earnest inclination to come to terms. They were invariably referred to the conditions offered them in November 1864, and were told to entertain no

hope that any modification would be admitted. They were also warned that, unless they acceded to these terms in their entirety, the British force would enter Bhután in the ensuing cold weather, and exact its own conditions at Punakhá and Tongso, the Bhutiá capitals. At the same time, preparations were actively pushed forward on a sufficient scale for the despatch of two columns into the heart of Bhután, one to start from Baxá, and the other from Díwángirí; and the construction of roads into Bhután territory was conducted with considerable energy. The Bhután authorities were soon convinced, by the reality of these preparations, that the Government of India was in earnest, and they accepted the terms which had been offered them, with the additional stipulation that the two guns which had been abandoned in the retreat from Díwángirí, and which were then in the possession of Tongso Penlo, should be restored to the British Government. A treaty of peace on these terms was accordingly concluded on the 11th November 1865; and it was hoped anticipated that the material guarantee for the good conduct of the Bhutiá chiefs which the Government possessed, in the shape of withholding payment, either altogether or in part, of the annual grant, would secure the peace of the border, and generally put a stop to the raids and scenes of rapine which were of such frequent occurrence in former years.'

These expectations have been fully realized. Since that time, nothing has occurred to disturb the peaceful relations of the Government with Bhután, raids upon our frontier have altogether ceased, and the annexed tracts have settled down into peaceful and prosperous British Districts.

General Aspects and Superficial Configuration of the District. — The general aspect of the Regulation part of the District, that is to say, of the four police circles of Bodá, Fakírganj, Siliguri or Sanyásikátá, and Pátgrám, is that of an extensive rice plain, with occasional patches of grass land, undiversified by hills or any large sheets of water, very similar in appearance to the neighbouring Districts of Rangpur and Dinájpur. The country is level and open, dotted with numerous homesteads of *jotdárs*, each enclosed in its shady grove of bamboo, plantain, mango, jack, and betel-nut trees. Some of these homesteads have an exceedingly neat and comfortable look. There is little appearance of waste land along the banks of the numerous small streams and watercourses (*khálś*) which intersect the Subdivision. Patches of tree

jungle and brushwood are met with, not of any considerable extent, but still large enough to afford refuge to the wild animals in the vicinity. The only large tract of uncultivated country in the Subdivision is a valuable and extensive *sál* forest, comprising an area of about fifty or sixty square miles, and situated about twelve miles north of Jalpáigurí town. It is known as the Baikunthpur Jungle.

The Bhután Dwárs, the tract which was annexed at the close of the war of 1864-65, is a flat, level strip of country, averaging about twenty-two miles in width, running along the foot of the Bhután hills; its chief characteristics are the numerous rivers and hill streams which intersect it in every direction, and the large tracts of *sál* forest and heavy grass and reed jungle, interspersed with wild cardamoms. These grass and reed tracts are especially dense and luxuriant along the banks of the rivers and streams, where they grow many feet in height; in some places they are impenetrable by man. Here the beautiful cotton tree (Bombax malabaricum) is to be found growing in great luxuriance and with surprising vigour and rapidity, resisting even the action of the fires by which the jungles and undergrowth are yearly consumed at the commencement of every cultivating season. With this single exception, these vast tracts of grassy jungle are almost treeless, and bring out into greater relief the village sites, situated few and far between. These little hamlets are remarkable for the most luxuriant vegetation. Large clumps of bamboos and groves of plantain trees hem them in on all sides, almost hiding the houses from view. Above them are seen the tall, graceful betel-nut palms, and here and there a few other large trees, such as mango, jack, and *pipal;* and round about the dwellings, in fact up to the very doorways, are shrubs and creeping plants of endless form and variety. Fine fields of rice and mustard are also found in the vicinity of the villages. The scenery in the north of the Dwárs, along the foot of the mountains, where the large rivers debouch upon the plains, is very grand and beautiful, especially at the point where the Sankos river leaves the hills. In the neighbourhood of the Bhután range, for from five to ten miles before reaching the hills, the land rises gradually. In this tract the soil is only from three to four feet deep, with a substratum of gravel and shingle; and in the dry season the beds of the streams for some miles after leaving the hills are dry, the water reappearing farther down. Owing to the difficulty of procuring water, there are no villages in this region.

MOUNTAINS.—The only mountainous tract in the District is that portion of the Bhután range in the immediate neighbourhood of the military outpost station of Baxá, near the northern boundary-line of the Western Dwárs. The boundary here between British and Bhután territory is the Sinchulá (or more properly Tchinchula, as the word is a Bhután one) range. From one of its highest peaks, called Chhotá Sinchulá, which has an altitude of 5695 feet, a splendid view is obtained of the whole of the Baxá Dwár. In the distance are seen large green patches of cultivation, in the midst of wide tracts of brown grass and reed jungle, the cultivated spots being dotted here and there with homesteads or small hamlets; whilst nearer to the hills are dense and extensive tracts of *sál* and other tree forests, the whole being intersected by numerous rivers and small streams. The Sinchulá range has an elevation varying from 4000 to a little over 6000 feet, the highest peak, Renígango, being 6222 feet above sea level. The hills run generally in long even ridges, but here and there the summits bristle up into peaks of from two to three hundred feet. Below Sinchulá, and on a range of hills varying from 1659 to 2457 feet in height, are situated the Baxá military cantonments, in 26° 45′ 15″ north latitude, and 89° 37′ 0″ east longitude, where a regiment of native infantry is kept permanently stationed. Baxá is thirty-two miles distant from Kuch Behar town, the two places being connected by a good road. The Sinchulá range can nearly everywhere be ascended by men and by beasts of burden, but not by wheeled vehicles of any sort, the whole range being thickly wooded from base to summit. Baxá is one of the principal passes into Bhután territory, and leads to Márichan in that State. At Sontrábárí, on the lower slope of the Baxá hills, there are some fine orange groves.

RIVER SYSTEM.—The principal rivers in Jalpáigurí District, proceeding from west to east, are—the Mahánandá, Karátoyá, Tístá, Jáldhaká, Duduyá, Mujnái, Torshá, Káljáni, Ráidhak, and Sankos. These rivers are nearly all navigable by boats of a hundred *maunds*, or between three and four tons burden, throughout the year, for a considerable portion of their course. In the Dwárs portion of the District, the rivers are only navigable as far as cultivation extends; in the tract where they leave the hills their beds are rocky, and rapids are met with. As already stated, too, owing to the porous character of the soil near the hills, the beds of the rivers in this tract are without water for some few miles of their course, after

debouching upon the plains. The following is a brief account of each of the chief rivers of the District, with their tributaries, etc.

(1) THE TISTA is the largest and most important river in the District, and is navigable throughout its course by steamers of light draught during the greater part of the year. It enters Jalpáigurí from Dárjíling at its north-western corner, and flows in a south-easterly direction until it passes into Rangpur District from Pátgrám. The Tístá forms the boundary of the Dwárs, dividing them from the permanently settled portion of the District, which, previous to 1869, belonged to Rangpur. On its left or east bank, the principal tributaries are the Lesu or Lish, Ghish, Sáldángá, and Dhallá rivers. It has no tributaries of any note on its right or west bank. The Tístá itself falls into the Bráhmaputra, a little above the town of Ráníganj in Rangpur District. Formerly it used to flow into the Ganges; but, as stated in my Account of Rangpur (vol. vii. p. 165), during the disastrous floods of 1787 the river suddenly forsook its channel and turned its waters into a small branch marking a still more ancient bed of the same river, which empties itself, as above stated, into the Bráhmaputra in Rangpur District. Major Rennel's Atlas of 1770 shows the old course of the river, and at page 352 of his *Memoir of a Map of Hindustán* he states: 'The Tístá is a large river which runs almost parallel to the Ganges for nearly a hundred and fifty miles. During the dry season, the waters of the Tístá run into those of the Ganges by two distinct channels situated about twenty miles from each other, and a third channel at the same time discharges itself into the Meghná; but during the season of the floods, the Ganges runs into the Tístá, whose outlet is then confined to the channel that communicates with the Meghná.' The banks of the Tístá are alternately abrupt and sloping, according as the current strikes from one bank to the other. This is a common feature of most large Indian rivers. Major Rennel, in writing of the Ganges, treats of this question at page 341 of his *Memoir*, quoted above, but his remarks apply equally to the Tístá, and may be quoted here:—'Commonly, there is found on one side of the river an almost perpendicular bank, more or less elevated above the stream according to the season, and with deep water near it; and on the opposite side, a bank shelving away so gradually as to occasion shallow water at some distance from the margin. This is particularly the case in the more winding parts of the river, because the very operation of winding produces these steep and shelving

banks. The current is always strongest on the external side of the curve formed by the serpentine course of the river, and its continual action on the banks either undermines them or washes them down. In places where the current is remarkably rapid, or the soil uncommonly loose, tracts of land are swept away in the course of a single season, such as would astonish those who have not been eye-witnesses to the magnitude and force of the mighty streams occasioned by the periodical rains of tropical regions. This necessarily produces a gradual change in the course of the river, the quantity lost on the one side being added to the other by the mere operation of the stream. The fallen pieces of the bank quickly dissolve into muddy sand, which is hurried away by the current along the border of the channel to the point from whence the river turns off to form the next reach, where, the stream growing weak, it finds a resting-place and helps to form the shelving bank, which commences at the point and extends downwards along the side of the succeeding reach. To account for the slackness of the current at the point, it is necessary to observe that the strongest part of it, instead of turning short round the point, preserves for some time the direction given it by the last steep bank, and is accordingly thrown obliquely across the bed of the river to the bay on the opposite side, and pursues its course along it till the intervention of another point again obliges it to change sides. In those few parts of the river which are straight, the banks undergo the least alteration, as the current runs parallel to them; but the least inflection of course has the effect of throwing the current against the bank, and if this happens in a part where the soil is composed of loose sand, it produces in time a serpentine winding. It is evident that the repeated additions made to the shelving bank before mentioned become in time an encroachment on the channel of the river, and this is again counterbalanced by the depredations made on the opposite steep bank, the fragments of which either bring about a repetition of the circumstances above recited, or form a bank or shallow in the midst of the channel. Thus, a steep and a shelving bank are alternately formed in the crooked parts of the river (the steep one being the *indented* side, and the shelving one the *projecting*). A continual fluctuation is induced in all the winding parts of the river; each meander having a perpetual tendency to deviate more and more from the line of the general course of the river by eating deeper into the bays, and at the same time adding to the points,

till either the opposite bays meet, or the stream breaks through the narrow isthmus, and restores a temporary straightness to the channel.'

Dr. Buchanan-Hamilton, in his MS. Account of Rangpur District, written about 1809, makes the following remarks regarding the condition of the Tístá and its branches, in its course through that portion of Rangpur which has been recently transferred to Jalpáiguri District :—'The Tístá enters this District at its northern extremity, where it is bounded by the country of Sikkim subject to Nepál' [now the British District of Dárjíling], 'and continues for about twenty-three miles from thence to be the boundary between the Company's territory and that of the Deb Rájá of Bhután' [now the Phálákátá or Western Dwárs Subdivision of Jalpáiguri]. 'It is here an exceedingly large channel, from six hundred to eight hundred yards wide. At all seasons it contains a great deal of water and has a swift current, but its navigation is somewhat impeded by stones and rapids. The Tístá begins to swell in spring, and usually rises two or three inches between the middle of April and the middle of May, owing to the melting of the snow in the mountains to the north; but no considerable increase takes place in its volume until the setting in of the rainy season. Immediately below Jalpáiguri town, the Tístá has the Company's territory on both sides, and receives from the west a small river named the Kharlá, on the western bank of which Jalpáiguri is situated. This stream takes its rise from among the lower hills in the Sikkim territory, and flows through this District for about twenty-four miles. Canoes frequent it in the dry season, and in the floods large boats are able to ascend it for a considerable distance. A short distance below this, on the west bank of the Tístá, is the mart of Madarganj. Although here a very large river, boats of a greater burden than 150 *maunds* cannot ascend the Tístá beyond this point in the dry season. In the rains, boats of any size may come. A little below Madarganj, the Tístá sends off a branch known as the Buri or Old Tístá, and which at the time of Major Rennel's Survey was its principal channel. On sending off the Old Tístá, the great channel turns eastward; and after passing Byankra, a mart in Fakírganj division, it receives the Kayá, a small stream which rises in Bhután, and has on its banks a place of some trade called Jarpakri. The Tístá then enters Kuch Behar.'

(2) THE MAHANANDA forms for a considerable distance the

boundary-line between Jalpáigurí and Dárjíling and Purniah Districts. It touches upon Jalpáigurí from Dárjíling District a short distance above Siligurí, at which place it receives the waters of the New Bálásan on its right or east bank, whence it flows in a southerly course as far as Titályá, where it passes into Purniah District. Dr. Buchanan-Hamilton in 1809 thus describes this river, so far as concerns the tract transferred from Rangpur to form the present District of Jalpáigurí:—'The Mahánandá, for about five miles after entering upon the plains, forms the boundary between the kingdom of Nepál and the Company's territory. For about six miles it separates this jurisdiction from that of Purniah, and then flows a long way through that District until it reaches the frontier of Dinájpur. So far as it continues on the frontier of Rangpur' [now Jalpáigurí] 'the Mahánandá is inconsiderable. It has, indeed, a channel of no small size, being perhaps three hundred yards wide; but in the dry season the quantity of water is trifling, and even in the highest floods it does not overflow its banks. It rises suddenly and falls quickly, so that boats do not attempt to navigate it; and even in the rainy season it is only frequented by canoes, which ascend with difficulty, but aid in floating down a little timber. In dry weather its stream is beautifully clear. From this District, the Mahánandá receives three small branches, which take their rise from springs in the fields. The most northerly is the Trínayi, which joins the Mahánandá a little south of Sanyásikátá. The next is the Ranchandi, which, rising in Sanyásikátá, afterwards separates that division from that of Bodá. The third is a more considerable stream; it takes its rise in Sanyásikátá from two heads, the eastern one called Chakar and the western Dayuk. After their junction this last name is preserved, and after passing through the division of Bodá, it joins the Mahánandá in Purniah District.'

(3) THE KARATOYA takes its rise in the Baikunthpur jungle *mahál* in the extreme north-west of the District, and after following a very winding southerly course, passes into Rangpur at the small market village of Ráiganj. This river is not navigable throughout the year; but in the rains, boats of a thousand *maunds*, or about thirty-five tons burden, can ascend as far as Ambárí Phálákátá, if not higher. Farther north, the stream becomes altogether inconsiderable. Its principal tributaries are the Tálmá and Chauí on the right, and the Sáhu on the left bank. These are not navigable streams, but mere rapid torrents, rising and falling six or seven feet

in the course of a day. During the greater part of the year they are almost dry. The banks of the Karátoyá are generally cultivated, but occasionally small patches of grass and brushwood are met with.

Dr. Buchanan-Hamilton gives the following account of this river as it existed in 1809, in its course through the tract comprising the present District of Jalpáigurí:—'The topography of this river is attended with numerous difficulties. It runs for about forty-five miles through the centre of the north-western divisions of this District, and is then swallowed up by the old channels of the Tístá. It forms the boundary for a few miles between Nepál and the dominions of the Company. It then passes a mile or two through the latter, and enters a small territory belonging to Bhután, through which it passes for five or six miles, and re-enters the District as a pretty considerable river, which in the rainy season admits of being navigated. Its channel is not so wide as that of the Mahánandá, but it does not rise or fall so rapidly. More timber is floated down its channel than that of the Mahánandá; and when it has reached Bhajanpur, a mart in Bodá, it is frequented in the rainy season by boats of four hundred *maunds* [about fifteen tons] burden. During this part of its course, it receives from the west a river which rises from the low hills of the territory of Sikkim, with two heads, named the Jurápání and Sanga, which unite under the latter name in the division of Sanyásikátá, and fall into the Karátoyá in Bodá. Below this for some distance, the Karátoyá marks the boundary between Rangpur [now Jalpáigurí] and Purniah, after which, turning to the eastward, it passes entirely through the former, and has on its southern bank a considerable mart named Pachágarh, to which boats of a thousand *maunds*, or about thirty-five tons burden, can come in the rainy season. It is, however, only boats of about half this tonnage that usually ascend so far. A little above Pachágarh the Karátoyá receives from the north a small river named the Chauí, which takes its rise in a field in Sanyásikátá division, and has a course of about fourteen miles. Below Pachágarh, the Karátoyá receives from the same direction a river named the Tálmá, which rises in the forests towards the frontier.

'From this point the Karátoyá is a very considerable river, passing through the division of Bodá, and in parts separating it from detached portions subject to the Rájá of Kuch Behar, until it receives from the Tístá a branch called the Ghorámárá. The united stream for

about two miles retains the name of Ghorámárá, for the old channel of the Karátoyá has become almost dry; but at Sáldángá, a considerable mart, the Karátoyá again resumes its name, and in the rainy season is usually frequented by boats of from five to six hundred *maunds* burden. The Karátoyá then continues its course to the south-east for about three miles, when it joins the Old Tístá and again loses its name, although it is at present the most considerable stream; but the immense sandy channel of the Tístá attests its former grandeur. In fact, when Major Rennel made his Survey, the great body of the Tístá came this way and joined the Atrái; but in the destructive floods of 1194 B.S. or 1787 A.D., the greater part of the water of the Tístá returned to its more ancient bed to the east (in which it still continues to flow), and has left this immense channel almost dry. I shall therefore proceed to give an account of this channel as forming a part of the Karátoyá.

'It is called the Burí or Old Tístá, although from the course of the Karátoyá it is evident that the original direction of the Tístá must have been somewhat near its present bed, that is, to the eastward. This Old Tístá separates from the great river at a place called Fakírganj, about nineteen miles north from its junction with the Karátoyá; and, except during the rainy season, it is not navigable by canoes. Even in the floods it does not admit boats of any size. Attempts have been made, by order of Government, to restore at least a part of the water of the Tístá to this channel, but the efforts have been in vain, and the waters are still (1809) diminishing every year. The water of the Old Tístá is still further lessened by the departure of the Ghorámárá, after which it continues a very trifling stream with an immense channel until it receives the Karátoyá at Devíganj.' [Dr. Buchanan-Hamilton describes the united stream from the junction as the Old Tístá, but in the Survey and all recent maps it is marked as the Kurto or Karto river, evidently a contraction for Karátoyá. The Karátoyá proper, however, takes its departure from the opposite bank of the Karto or Old Tístá, and now marks the boundary between Dinájpur and Rangpur Districts.] 'At all seasons canoes can navigate this portion of the river, and boats of a thousand *maunds* burden are often loaded at this mart, but the vessels usually employed are from four hundred to six hundred *maunds*. The river continues nearly of the same size until it reaches the frontier of Dinájpur, about nine miles below Devíganj; and the name of the Old Tístá [Kartá] continues to be given to it after it

has passed into Dinájpur, until it reaches the mouth of a canal which connects it with the Dhápá river. There it assumes the name of the Atrái.'

The Karátoyá proper branches off from the east or left bank of the Old Tístá or Kartá river, a short distance above the point where the latter passes into Dinájpur. After a few miles, the Karátoyá (but under a variety of names) marks the boundary between Rangpur and Dinájpur, until it passes into Bográ District. The confusion arising from these changes of name is owing to the alteration in the physical features of the country caused by the inundations of 1787, and the desertion by the Tístá of its western channel, by which it poured its waters into the Ganges by way of the Atrái, for its present or eastern bed by which it joins the Bráhmaputra. Dr. Buchanan-Hamilton states that 'the floods of 1787 seem totally to have changed the appearance of this part of the country, and to have covered it with beds of sand, so that few of the old channels can be traced for any distance; and the rivers which remain seldom retain the same name for more than three or four miles in any one part of their course. The name of the Karátoyá, in particular, is completely lost for a space of about twenty miles, and is only discovered again a little south of Darwání (a police station and village in the north of the present District of Rangpur).'

(4) THE JALDHAKA river takes its rise in the Bhután hills. It flows from north to south, marking the boundary between the British District of Dárjíling and the State of Bhután; and after entering Jalpáigurí in the Western Dwárs Subdivision, continues to flow in the same direction till it approaches the southern boundary, when it takes a sweep to the east and enters Kuch Behar territory. The Jáldhaká is a fine wide river, but very shallow in proportion to its size; it forms the boundary-line between *parganás* Marághát and Máinágurí. Its principal tributaries within Jalpáigurí District are (1) the Murtí, a considerable stream flowing from the Dalíngkot mountainous tract of Dárjíling District, and falling into its west or right bank in Máinágurí *parganá*, about ten miles from the northern boundary; and (2) the Diná, also a large stream, which takes its rise in the Bhután hills, and, flowing in a south-westerly direction, falls into the river on its east or left bank in Marághát *parganá*, opposite the village of Rám Sahái Hát. The Diná is swollen by several minor tributaries of its own, which all join it on its right bank. The large village and police outpost station of Ambárí is

situated on the left bank of the Diná, a few miles from the northern boundary of the District.

(5) THE DUDUYA is the next river, proceeding eastwards. It is formed by the combined waters of the Gayerkutá, Nanái, and other small streams, all of which take their rise in the north-west of the Dwárs. After the junction of the Gayerkatá and Nanái, the stream flows in a south-easterly direction as the Duduyá, and passes into Kuch Behar territory at a village called Dakálikobá Hát. The principal tributaries of the Duduyá are (1) the Gulandi, which rises in the north of the Dwárs, and, flowing south and south-east, falls into the west or right bank of the Duduyá at its point of exit from the District; (2) the Kaluá or Rehti, (3) Barábank, (4) Dem-dema, and (5) Tásátí streams, which take their rise in the Bhután hills or the north of the Dwárs, and which join the main stream on its east or left bank.

(6) THE MUJNAI takes its rise in the southern slopes of the Bhután hills, and flows in a winding southerly direction into Kuch Behar. This river roughly marks the boundaries between *parganás* Lakshmipur and Madárí. Its chief tributaries on its right or west bank are (1) the Títí, (2) the Angorijhora and (3) Dábdhub, two streams which unite shortly before joining the main stream, (4) the Páglí *nadí*, (5) the Surtí *nadí*, and (6) the Bírpítí river; these two latter streams unite in the south of the Dwárs, and the united river, under the name of the Bírpítí, falls into the Mujnáí a short distance above the point where that river passes into Kuch Behar. On the left or east bank its principal affluents are (7) the Old Torshá and (8) the Halong, two streams which flow into each other a few miles above the point where the united waters, under the name of the Old Torshá, fall into the Mujnáí, in the extreme south of the Dwárs.

(7) THE TORSHA is a considerable river, which rises in the Bhután range, and flows south through the Western Dwárs, passing through the centre of Madárí *parganá*, till it enters Kuch Behar territory, at the village of Nekobarpárá. Its tributaries on its right or west bank are (1) the Bhelá Kubá, and numerous small streams; and on its left or east bank (2) the Hánsmárá. This latter is more properly a branch of the main channel, as it is thrown off by the Torshá just above the northern boundary of the Dwárs, flows a southerly course parallel to it, and after about fifteen miles in a straight line, rejoins the parent stream.

(8) THE KALJANI river is, in fact, the combined waters of the Aláikurí and Dimá rivers, which first take the name of the Káljání after their junction at Alípur, the former Subdivisional

headquarters. The united stream has only a course of a few miles in the Western Dwárs, and for a few miles farther marks the boundary-line between the District of Jalpáigurí and Kuch Behar State. The Káljání proper has no tributaries of any importance on its right or west bank within the Western Dwárs; but on the left or east bank it receives the waters of the Nunái, Chek, and Godádhar streams. The Aláikurí, which supplies the greater portion of the water to the Káljání, is a river of some size which takes its rise in the Bhután hills, and after flowing a southerly and south-easterly course through the Western Dwárs, joins its waters with the Dimá, as above stated, and becomes the Káljání. The principal tributaries of the Aláikurí on its west or right bank are (1) the Gábur Báchrá, (2) Burí Báchrá, and (3) Bániá *nadís*; and on the left or east bank, (4) the Nimtijhorá and (5) Paror *nadís*. The Dimá, which forms the other affluent of the Káljání, is also a considerable stream, rising in the lower Bhután hills near Baxá, and flowing southwards to its confluence with the Aláikurí. Its only tributaries of any importance are (1) the Garm *nadí*, on its right or west bank, and (2) the Doriá *nadí* on its left or east bank. The Aláikurí and Káljání rivers mark the boundary-line between the *parganás* of Chakoá Kshattriya and Baxá.

(9) THE RAIDHAK, the next large stream to the eastwards, also takes its rise in the Bhután hills, and flows southwards through the Western Dwárs, till it enters Kuch Behar territory near a small village called Bhurjkutí. In its northern course through the District, the river forms a large island by throwing off a branch stream, called the Máinágáon *nadí*, which leaves the Ráidhak at the point where it enters the District, and rejoins it about eight or nine miles lower down. The principal tributaries of the Ráidhak on its right or west bank are the Najarkupá, Násírpák, and Báklá *nadís*. It has no tributaries of any importance on its left or east bank, but shortly before leaving the District it throws off an offshoot, the Ghorámárá, which also passes into Kuch Behar territory. The Ráidhak, in its course through the Western Dwárs, marks the boundary between Bholká and Bhátibárí *parganás*.

(10) THE SANKOS marks the extreme eastern boundary of the Western Dwárs, separating them from the Eastern Dwárs, now attached to the Assam District of Goálpárá. Its principal tributary on its right or west bank is the Ghulání river.

CHARACTER OF THE RIVERS.—The foregoing ten large rivers are all (with the exception of the Karátoyá) navigable throughout the

year for a considerable distance of their course by boats of a hundred *maunds*, or between three and four tons burden. In the Western Dwárs portion of the District, navigation extends as high up as the cultivation limit; beyond this, the beds of the streams become rocky, and rapids occur. Owing to the extremely porous nature of the soil along the foot of the Bhután hills east of the Jáldhaká, the water of all the rivers in this tract, with the exception of the Jáldhaká, Torshá, Gadádhar, Ráidhak, and Sankos, at the point of their debouchure on to the plains, disappears from their beds, leaving the channels dry, and does not reappear for some miles, until the narrow strip of gravelly soil is past. The Tístá, Jáldhaká, and Ráidhak rivers are always more or less cutting away their banks and changing their courses, forming islands and sandbanks in their channels. I have already described the change in the course of the Tístá caused by the inundations of 1787, when that river suddenly deserted the channel by which its waters found their way into the Ganges by way of the Atrái, and made its way across country, and along a still more ancient bed, into the Brahmaputra. The main waters of the Tístá still flow along this channel into the Brahmaputra within Rangpur District. The beds of all the rivers are sandy in the plains; but when traced up towards the hills, they are gradually found to be first pebbly, then stony, and lastly full of boulders. Within the Regulation portion of the District—the tract lying to the west of the Tístá—a great deal of cultivation is carried on along the banks of the rivers and streams; but in the Western Dwárs or Phálákátá Subdivision, the river banks, excepting in the immediate vicinity of the villages, are for the most part covered with jungle and waste. None of the rivers anywhere expand into lakes.

FORDS AND FERRIES.—The Tístá is nowhere fordable within Jalpáigurí District at any period of the year, and eight ferries are maintained on it throughout the year at the following places:—One opposite the town and civil station of Jalpáigurí at Abuder *ghát*; one higher up at Paháripur; and farther upwards still, two others at Rangdhámálí and Baikunthpur; below the civil station and near the military lines is a ferry at Halápákrí; and lower down, another at Madarganj *ghát*, where the road to Kuch Behar crosses the river; below this, again, two other ferries are maintained at Kátámárí and Bailmárí. A ferry is kept up on the Mahánandá at Siliguri, at the point where the Dárjíling road crosses the river. Ferries are also maintained throughout the year on the Duduyá,

Mujnáí, Torshá, Káljání, Chek (a tributary of the Káljání), Ráidhak, and Sankos rivers, at points where they are crossed by the main line of road which runs east and west through the Western Dwárs. In these rivers the water is nearly always too deep to admit of any one crossing on foot without great difficulty, and for practical purposes they may be said not to be fordable at any period of the year. The Jáldhaká, though a broad river, is very shallow, and rises and falls in a few hours. During the rains, a ferry is maintained on the river at the point where the road crosses it; but after the rainy months are over, it is removed, as at all other seasons the river is easily fordable on foot. Another temporary ferry is also kept up on the Gadádhar river for a month or two during the rains, but is removed as soon as the floods have subsided. Hardly any of the smaller streams or watercourses are fordable during the rainy season, but most of them are spanned by wooden bridges along the lines of roads. The Karátoyá is not fordable in the rains below Bhajanpur, where the main road from Jalpáiguri to Titályá crosses it, and a ferry is maintained here during the floods; in the dry season, however, it is fordable at almost every point. The District ferries are leased out year by year to the highest bidders.

There are no important lakes in the District, nor have any canals or artificial watercourses been constructed especially for the purposes of irrigation; but the Mechs and other cultivators who live in the north of the District artificially irrigate their lands to a great extent by cutting small drains from the neighbouring streams on to their fields. The reported loss of life by drowning in the District is returned at 43 in 1868, and at 54 in 1869. Out of these, the loss in the Western Dwárs Subdivision is returned as *nil* in 1868, and 5 in 1869. These figures, however, only represent the number of cases reported to the police; and the Deputy-Commissioner, in his report to me, states that there is no doubt that the real loss of life from this cause must be much greater than the police returns indicate.

River Traffic.—There is no town in Jalpáiguri District inhabited by a considerable community living by river traffic. The Deputy-Commissioner, however, states that at a little trading village called Baurá Hát, situated on a small tributary of the Tístá, in Pátgrám *thánd*, in the extreme south of the District, there are about a dozen merchants who carry on an extensive trade in jute, tobacco, and rice, which they collect from all parts of the District,

and export by way of the Tístá to Sirájganj, Dacca, and the other eastern markets. Although there are no river-side towns or large villages which depend for their support mainly upon river trade, yet a considerable water traffic is carried on. The chief downward traffic is in *sál* timber, which is cut in Dárjíling District, in the forests of the Western Dwárs, and on the large jungle estate of the *zamíndár* of Baikunthpur on the west bank of the Tístá, in the extreme north of the Jalpáigurí Subdivision. The *sál* logs when cut down are taken to the banks of the nearest river, lashed to boats to keep them from sinking, which they would otherwise do, owing to the weight and density of the timber, and floated down the streams to the Brahmaputra, on their way to Sírájganj, Dacca, and other places. Rice, tobacco, mustard-seed, jute, and cotton are also largely exported from Jalpáigurí District by water. The up-stream traffic is principally confined to the importation of salt, brass household utensils, cloth, and fried fish. The latest statistics available for the river trade are given in a subsequent section of this Account (pp. 299, 230).

UTILIZATION OF THE WATER SUPPLY.—None of the rivers or streams of the District are anywhere applied as a motive power for turning machinery; but the Deputy-Commissioner is of opinion that they nearly all possess sufficient rapidity of current to enable them to be utilized in this manner by the construction of dams. With the exception of the cultivators in the northern part of the Western Dwárs, who, as above stated, cut small irrigation channels from the hill-streams on to their fields, river water is not applied for purposes of irrigation in Jalpáigurí. It is stated that the water of the streams that do not take their rise in the hills is generally of bad quality.

FISHERIES.—There are no regular fishing towns in Jalpáigurí District, nor is there any class of people who solely make their living by fishing, as the fisheries are not sufficiently valuable to be depended upon as a means of affording a regular livelihood. In 1870, the Deputy-Commissioner reported that there were about four or five hundred families of fishermen in the District, but that they were unable to live by the produce of their fishing alone. Nearly all fishing families cultivate land also, the produce of which affords them the main means of support. The fisheries in the Western Dwárs are the property of Government. The fishery rights were first put up to auction in 1870, and for that year realized the sum

of Rs. 1929 (£192, 18s. od.). The varieties of fish most commonly met with are the following:—*Ruhi*, *kátal* or *kátla*, *chitál*, *boáil*, *mirgál*, *nandiní tor*, *punthí tor*, *kursá*, *baus*, *sál*, *sáil*, *mahásáil*, *áir*, *bágháir*, *gágrá mágur*, *singí*, *tengrá*, *táki*, *golsá*, *kai*, *khalisá*, *bhedá*, *chándá*, *ilis* or *hilsa*, *bhángná*, *eláng*, *tatkiní*, *rayek*, *kachá*, *bachá*, *gháruyá*, *pángás*, *phalí*, *pábdá*, *kánkhilá*, *chánpilá*, *khatti*, *bhatti*, *garálí*, *baralí*, *cheng*, *chringri*, *báim*, *kunchiá*, *ganchiá*, *báliá*, *bátási*, *dwáriká*, *kuráil*, *bhol*, *panyá*, *mauyá*, *phensá*, *tepá*, *bángach*, *sángach*, *chelá*, *dháin*, *chhilan*, *punthí*, *kharsalá*, *jhatlá*, *kauniyá*, *bánspátá*, etc. The Deputy-Commissioner reports that the proportion of the District population who live by fisheries, navigation, and other river industries, is very small; and he doubts whether there are any people who gain their living altogether in this manner. What they do in this way is only auxiliary to their occupation as cultivators. With the exception of the boats for the timber trade, no boats of any large size are seen in the District, except in the rainy months, when a few native craft of somewhat large tonnage come up the Tístá from the southern Districts. The Census of 1872 returns the total number of Hindu boating and fishing castes in the permanently settled part of the District, that is, the police circles (*thánás*) of Silígurí or Sanyásikátá, Fakírganj, Bodá, and Pátgrám, at 1656. This is exclusive of Muhammadan fishers and boatmen; and the Musalmáns form 44·2 per cent. of the population of this part of the District.

Marsh Cultivation, etc.—There is very little marsh or low-lying land in either the Jalpáigurí or Western Dwárs Subdivision of the District, and no instance is recorded of land having been reclaimed by the construction of embankments. As there is abundance of good land obtainable in every direction, especially in the Western Dwárs, the Deputy-Commissioner reports that it would not pay to reclaim what little marsh land there is. Long-stemmed rice is not grown in the District. The river banks and low grounds are not utilized as reed or cane producing grounds. Reeds and canes are found growing wild in every part of the Western Dwárs, so that no artificial cultivation is necessary.

Lines of Drainage.—The general flow of water is from north to south-east, or from the Bhután range towards the Brahmaputra. The soil being sandy and porous, the rainfall is soon absorbed; the surplus water finds its way into the numerous creeks and watercourses which intersect the country in every direction, and from them into

the larger streams, which all (with the exception of the Mahánandá and the Karátoyá, in the extreme west of the District) eventually find their way into the Brahmaputra. The Mahánandá and Karátoyá ultimately fall into the Ganges. There is no succession of swamps or marshes by which the surplus water finds its way out of the District.

MINERALS, ETC.—Limestone is found in considerable quantities in the Baxá hills, and in the lower Bhután hills. An inexhaustible supply may be obtained from a high range of hills near the place where the Torshá river debouches upon the plains; but this is just beyond British territory, and the Bhután authorities would no doubt demand a royalty for working the mineral. The limestone hills to the east of Baxá are within the British boundary. Tufa or calcareous limestone is found in large masses along the base of the hills. Copper has been recently discovered at a spot half a mile west of Baxá, but has not yet been worked; copper and iron are both worked in the mountains just across the British frontier. Coal is not known to exist in Jalpáigurí District. Building-stone of a good quality is procurable in the Baxá hills. A further description of the limestone and other mineral deposits of the Western Dwárs will be found in my Statistical Account of Dárjíling (*ante*, pp. 129-158), in which I have quoted at length from a paper by Mr. F. G. Mallet on the geology of Dárjíling and the Western Dwárs, published in the *Memoirs of the Geological Survey of India* (vol. xi. part i. 1874); so that nothing beyond the bare mention of their existence is needed here. There are no hot springs in Jalpáigurí District; and the only interesting natural phenomena worth mentioning are the gorges at the foot of the hills in the Western Dwárs, where the large rivers debouch upon the plains, which are very picturesque and beautiful.

FORESTS.—Jalpáigurí contains several extensive and fine forest tracts. In the Regulation part of the District, in the extreme north, is an extensive and valuable *sál* forest, known as the Baikunthpur Jungle Mahál, within which there is also an extensive pasturage ground. It belongs to the Ráikat or Rájá of Baikunthpur. In 1870, the proprietor had farmed out the whole tract at a rental of Rs. 3000 (£300) per annum; but the Deputy-Commissioner, in his report to me, states that with better management and supervision, it ought to yield him at least three times this amount. In 1870, the Deputy-Commissioner returned to me the various forest tracts in the Western Dwárs, together with their

respective areas, as follow:—(1) In Bhalká *parganá*—Sálbárí forest, with an area of 8104 acres. (2) In Bhatibárí *parganá*—Chakirbás Jhár (part of), area 992 acres; Chakirbás Jhár (part of), 2544 acres; Mahákalgurí, 80 acres; and Síbkátá Ushnibárí (part of), 352 acres: total 3968 acres. (3) In Baxá *parganá*—Mainá-gáon, area 6526 acres; Sanyásí Jhár, 4510 acres; Barmáli, 19,448 acres; Pánbárí, 25,517 acres; Pánialgurí Chhotmálá (part of), 624 acres; Chuápár Jhájángí, 15,272 acres; Ráimatang, 8171 acres; Natábárí (part of), 7344 acres; Atiábárí Dhuldábrí, 6638 acres; Nimtár Domohaní (part of), 2098 acres; Odlágurí, 6182 acres; and Pátkáprá (part of), 1360 acres: total 103,690 acres. (4) In Madárí and Chakoá Kshattriya *parganás*—Bara Jhár Satálí, 26,707 acres; Satálí Mendábárí, 784 acres; Patlákháwá, 608 acres; and Chakoá Kshattriya Pásti Sál, 763 acres: total 28,862 acres. (5) In Lakshmipur *parganá*—Dumchí Chápágurí, 1580 acres; Dalgáon Sarugáon, 1730 acres; and Nipániá, 723 acres: total 4033 acres. (6) In Marághát *parganá*—Sálbárí, 8160 acres; Gáyerkatá, 5000 acres; Sanko Jhár, 1130 acres; Bánárhát, 430 acres; Kháyer-katá (east of the Dimá river), 1600 acres; Dudumárí Kalábárí, 566 acres; Kalábárí, 6587 acres; Tandu, east, 3785 acres; Kháyer-kátá (west of the Dimá river), 1569 acres; and Sálbárí, near Golándí, 6½ acres: total 28,833½ acres. (7) In Mainágurí *parganá*—Tandu, west, 16,838 acres; Bhargilá Jhár, 11,466 acres; Barádíghi, 11,747 acres; and Dhop Jhár, 1686 acres: total 41,737 acres. Grand total of forest area, exclusive of the Baikunthpur Jungle Mahál in the Jalpáïgurí Subdivision, which is private property, 219,227½ acres, or 342·54 square miles.

The Forest Department returns the Government forest areas in the Western Dwárs Subdivision as follow:—(1) Lísh and Ghísh; (2) Tandu or Mainágurí; (3) west of the Murtí river or part of Mainágurí; (4) Marághát; (5) Lakshmipur; (6) Bara Jhár Satálí; and (7) Baxá. They are, with the exception of Nos. 1 and 3, identical with the tracts mentioned above; but I quote the following paragraphs from the Report of the Assistant Conservator of Forests for 1871-72, as giving a detailed description of the varieties of trees found, soil, etc. of each tract:—

(1) 'Lish and Ghish Forest.—This tract runs from the foot of the Dámsang hills in Dárjíling to Lísh and Ghísh, covering an area of about 2000 acres. It consists of dense grass and creeper jungle, with common trees on it here and there, till the Rangdang *jhorá* or

creek is reached, where it consists simply of *nal* or reed jungle, the stronghold of elephants and rhinoceros. The first part of this jungle, after crossing the Tístá, is high ground, and very rich and well-drained sandy soil; there are not more than about 20 *sál* trees on it. From the Tístá to the Rangdang *jhorá* it is complete waste land. On crossing the Rangdang *jhorá*, the land is undulating, well-drained for the most part, but a poor, red, sandy clay, without any surface soil. No *sál* trees of any kind are on this last patch, which consists of dense grass, with creeper jungle here and there.

(2) 'MAINAGURI OR TANDU.—This tract stretches from the Dhallá, a tributary of the Tístá, to the Jáldhaká river, and covers an area of 41,737 acres. It is principally flat land, with small *nálás* or watercourses intersecting it here and there, and has a stock of very stunted, half-burnt *sál* on it, with very few of any size; in fact, no tree fit to cut. It is a very large tract, high-lying and without swamps, and no doubt would have good timber on it if jungle fires could be put down; but it is burnt year after year, and all the young *sál* killed, and the half-grown trees so injured that many of them die, and some become stunted and grow up with a lot of little branches all round the tree. The leading shoot is very often killed when small, which makes the tree almost useless.

(3) 'PART OF MAINAGURI, WEST OF THE MURTI RIVER.—This is a patch of *sisu* forest on the banks of the Jáldhaká. It is a small block, and has very little mature timber on it. Some 50 logs might be got off the patch, but not more. *Sisu* on these streams never come to much, as the rivers are continually changing their course, and the timber does not get time to grow. I do not think much can be done to improve this strip of *sisu*, and am not of opinion that grazing does much harm. Jungle fires do not go into it.

(4) 'MARAGHAT FOREST.—This is by far the best forest now held by the Department. It covers an area of 28,833½ acres, with a very rich, dark-coloured soil. Here and there it is stony and sandy, but not very much so; it is very well drained, and is for the most part well stocked with *sal* and a few *chalauní* trees. There are many mature or full-grown timber trees on this tract which should be cut. I should say that not less than 500 or 600 trees might be cut this coming cold weather (1872). There is much heavy grass jungle in one or two places, also many creepers. The best timber on the tract is down the Nimái river, towards the Phálákátá

road at the end of the block. This forest would supply yearly about 250 logs of a good size, if it were properly looked after and jungle fires were kept out.

(5) 'LAKSHMIPUR FOREST.—This is all *sisu* forest, and covers an area of 4033 acres. There are a few, but only a few, well-grown trees on this tract; I do not think that more than 200 mature trees could be found. The tract lies along the banks of the Raktí *nadí* and a few other small streams; the soil is sandy. Besides *sisu*, it contains some *kháyer*, but not of any size. It is impossible to estimate what this tract would yield yearly, or, indeed, the value of any of this class of forest, as the rivers frequently change, and carry away large patches of *sisu* every year.

(6) 'BARA JHAR SATALI *sál* forest is a very large tract of land held by the Department, but not much more than three parts of it contain timber. Its area is 28,862 acres; it is flat land, with low, damp patches here and there. The soil is a heavy, reddish-coloured clay, looks rich, and is not very sandy. The *sál* trees appear stunted and unhealthy in some parts, and in other places very healthy. The west end is well drained, and also the eastern end; but about the middle it is a little swampy. There are many old *sál* trees on it of large size, but of a bad kind; they are knotty, with large branches, and also very crooked. I should say this forest would give about 500 full-grown trees which should be cut.

(7) 'BAXA FOREST.—This forest comprises twelve blocks or patches. The soil of nearly all the twelve blocks is rich, dark in colour, and sandy below the surface; there are a few swamps, but not many. As a rule, the tract is well drained by *nálás* and small streams; it contains *sál* timber mostly, with a few *sisu*, *kháyer*, and Magnolia, and also indiarubber trees, mixed with many kinds of common jungle trees. There are large patches of heavy grass where there are no *sál* or timber trees. Much of the fine timber was cut before the tract came into the hands of the British Government; it yet contains a large supply of mature timber, both *sál* and *sisu*, and a few Magnolia,—the latter on the sloping ground near the foot of the Baxá hills. The area of the tract is 103,690 acres. The best timber is met with in the northern parts.'

The forests in the Dwárs, up to the close of the financial year 1871-72, were all 'open;' but the reservation of the richest portions within the tracts was intended to be commenced during the following cold season. As already stated, the forest tract of the Baikunth-

pur Jungle Mahál is private property, and is annually leased out by the proprietor. An experimental Government teak plantation at Phálákátá, in the Western Dwárs, was laid out and commenced during 1871-72.

The following paragraphs, quoted from Dr. Buchanan-Hamilton's MS. Account of Rangpur, give a description of the forests in the tract which then constituted the northern portion of that District, but which has recently been transferred to Jalpáiguri, as they existed in 1809, together with the methods in which the forests were managed, cost of felling, uses to which the timber is put, etc.

'The woods of Battris-hazári or Baikunthpur have been nearly exhausted of *sál* and *sisu*, the only trees that are cut for exportation, although they still contain a great abundance of timber in reality, perhaps, more valuable. Still, however, some people are employed, partly in these woods, and partly in those which are adjacent to the territories of Bhután and Nepál. I shall give here an account of the whole, as I have no means of distinguishing between the quantity procured in each. The woods of Bhután that are near the rivers are as much exhausted as those in the Company's territory, so that the greater part of the timber is brought from Nepál; and none is cut at a farther distance than three miles from some branch of the Tístá or Karátoyá, by which the logs can be floated into these rivers. In places where the ground is quite level, the logs are placed on two small wheels, and dragged by men; where the ground is broken or uneven, they are carried. Cattle are never employed, so that no large log is ever procured; and the felled trees are cut up into pieces, which are shorter and shorter in proportion to their girth, in order that the weights of all the logs may be nearly equal. No timber is cut except when commissioned, and the value is always paid in advance. The purchases are mostly made by native merchants from Deviganj in this District, and from Kangtápukhurí in Nattor [Rájsháhí]; the timber is intended chiefly for building boats. The advances are made to men called *dafáddrs*, who employ workmen at monthly wages; and each of them contracts to deliver what is called a *dhura* of timber at a specified place on a river bank, from which it can be floated down stream.

'The logs are merely freed from the branches and bark; the trees having previously been cut two or three feet from the ground, as more convenient for the stroke of the hatchet, the use of the saw being unknown, and the waste of timber being considered of no

consequence. The stem of the tree is cut into as many lengths in proportion to its thickness as it will admit, and the tops and large branches are left to rot, or to be carried off by any person who chooses. Each *dafádár* employs 4 carpenters, that is, men who can use an axe, and 36 labourers. The *dhura* of *sál* timber, which these 40 men can bring out in a season, consists of the following pieces :—30 pieces, 12 cubits long by 4 in girth; 40 pieces, 13 or 14 cubits long by $3\frac{1}{4}$ or $3\frac{1}{2}$ in girth; and 56 pieces, 15 or 16 cubits long by 3 or $3\frac{1}{4}$ in girth; total, 126 pieces. The *dafádár* receives from Rs. 140 to Rs. 150 for each *dhura*, which is paid between the middle of November and the middle of January; all the timber is delivered before the middle of May. The expenses of the *dafádár* are as follows :—4 carpenters at Rs. 3 each, Rs. 12; 36 labourers at Rs. 2, Rs. 72; rice for 40 men for 75 days at 30 *sers* a day, 2250 *sers* at 80 *sers* for a rupee, Rs. 28. 2. 0; rope, Rs. 2; sacrifices, Rs. 2; total, Rs. 116. 2. 0. The men are absent in the woods about $2\frac{1}{2}$ months, and during that time live only upon rice seasoned with ashes, and wild fruit and vegetables, of which they find a great variety, and any game which they can secure.

'From twenty-five to thirty *dafádárs* are usually employed every year. In order to superintend the *dafádárs*, to settle with the owners of the forest, and to bring the timber home, the merchant employs a man called a *charandár*, who is allowed Rs. 3 a month for nine months in the year. On the Tístá, the usual expense of bringing out a *dhura* of *sál* timber is as follows :—For the *charandár* or agent, Rs. 27; rent, say Rs. 50; for floating the timber to Fakírganj, two logs being tied to a canoe, one on each side, a rupee for each log, Rs. 126; for the wood-cutters, Rs. 150; total, Rs. 353.

'The tops and branches of the felled trees, which are very good timber, are only used when any rich person in the neighbourhood wishes to build a house and requires wooden posts. *Sisu* timber is mostly crooked, and is never bought by the natives, who seldom use it. On an average, about two *dhuras* or 252 logs may be cut yearly on account of Europeans.

'The people of Battris-hazári make annually about 150 or 160 canoes, of several different kinds of tree, but chiefly of *sál* timber that is too large for them to bring down in logs. The canoes are exceedingly rude, and are formed merely by smoothing the tree a little, cutting it into a kind of goose-tail head and stern, and then hollow-

ing it out with a small adze. Six men usually work together, for mutual protection from wild beasts. They make two canoes during the season, one about 23 or 24 cubits long, and 2 cubits in diameter, worth Rs. 18; and one rather smaller, worth Rs. 12. These men are always commissioned by others, and the above values represent the price the workmen receive. The men are employed not quite two months, and the greater part of the canoes are made on the banks of the Dharlá.'

PASTURE GROUNDS, WILD VEGETABLE PRODUCTS, ETC.—The whole of the land in the Western Dwárs that is not forest or under cultivation is one vast pasture ground. Immense herds of buffaloes and cattle are annually brought up from Bengal to graze; a yearly revenue of Rs. 4970 (£497) was realized from a farmer who took a lease from Government of the pasture grounds for a period of five years, commencing from 1865-66. In the Regulation portion of the District, there are extensive pasture grounds within the Baikunthpur Jungle Mahál, which is private property. There is no class of people inhabiting the District who make their living by depasturing in the forest; those who do graze their cattle there nearly always come up with their animals from Bengal, and return again with their herds. With the exception of a medicinal drug, called by the natives *jangli chiretá*, and some lac and beeswax, there is little or no trade in jungle products. The Rájbansís and Mechs collect what little jungle produce there is, principally in the Dwárs portion of the District, but this is only made a contingent occupation to agriculture. The right to collect lac in the Western Dwárs was sold for Rs. 68 (£6, 16s.) in 1870. The sweet-scented *khaskhas* grass, called here *ganbinyá*, is found in the Western Dwárs, and a small sum is paid annually for the right to collect it.

FERÆ NATURÆ.—The wild animals and large game found in the District are wild elephants and *mithun* or wild cattle, found only close to the hills; and rhinoceros, wild buffaloes, tigers, leopards, bears, wild hogs, *bará singhá* or red stags, *sámbhar* deer, etc. The sum of Rs. 1738 (£173, 16s. od.) was paid during 1869 in the shape of rewards for the destruction of wild animals. Prior to July 1867 no rewards were offered; and in 1868 it was found necessary to increase the rewards then in force to the sum of £2 for each tiger, and £1 for a leopard. By far the greater number of animals thus destroyed are killed in the Western Dwárs portion of the District, the increased rewards having induced a number of

native *shikáris* (huntsmen) to come up from Bengal to destroy them. No rewards have ever been given for snake killing. The number of deaths reported to have occurred from wild beasts and snake-bite was 65 in 1867, 76 in 1868, and 62 in 1869, for the Western Dwárs alone. These figures show the number of cases reported to the police; but the Deputy-Commissioner is of opinion that they do not correctly represent the loss of life from this cause, and that many deaths of this sort are not reported at all. Long-nosed alligators are found in many of the larger rivers.

Among the smaller kinds of game are fallow deer, hog deer, antelopes or black buck, hares, foxes, porcupines, civet cats, *happa* or wild cats, mongooses, jackals, and monkeys. The principal game-birds met with are pea-fowl, floricans, wild ducks, teal, wild fowl, wild geese, red and black partridges, quail, snipe, golden plover, etc. I have already enumerated the list of fishes on a previous page (p. 238). No trade is carried on in wild-beast skins in Jalpáiguri; and, with the exception of the fisheries, the *feræ naturæ* are not made to contribute in any way towards the wealth of the District.

Population.—The population of the Regulation part of the District, according to a rough Census made in 1858-59, at the time of the Revenue Survey of Rangpur (to which District it then belonged), was returned at 189,067; the number of houses being put down at 37,529. No information is given as to the principles on which these estimates were based; and the Deputy-Commissioner in 1870 stated that, both as regards the number of the population and the number of the houses, he was of opinion that the estimate was too low. The number of houses returned would give a little over five inmates to each house; while the Deputy-Commissioner stated that it was not an uncommon circumstance to find an ordinary agricultural household to consist of from fifteen to twenty members. The results of the regular Census of 1872, which are given below, fully corroborated the Deputy-Commissioner's opinion.

The Census of the permanently settled *parganás* was taken by the authority of Government during the cold weather of 1871-72. For various reasons, it was found impossible to attempt a simultaneous census, and the ascertained results were arrived at by a gradual enumeration which lasted through nearly all the cold-weather months. Village headmen were appointed as enumerators; but

owing to their general illiterateness, the bulk of the work had to be done either by the writers in the Deputy-Commissioner's office, or by extra clerks, or by police officers selected for the purpose. One circumstance which increased the difficulty of the work is thus described by Captain Money:—'Many villages have no names, but simply take that of the *jot* on which they are situated. Owing to this, an enumerator had sometimes to travel over a dozen villages before he could collect the statistics for all the hamlets called by a single name. For instance, Shikárpur, a village in Chaklá Bodá, has a few houses in one place, which are first pointed out to the enumerator. Six or seven miles from this place he meets another small hamlet, which he is told is a part of the village he enumerated perhaps days before. On inquiry, it turns out that the portions of Shikárpur are in seventeen or eighteen different places, distant from each other from five to seven miles.' With regard to the accuracy of the Census, the Deputy-Commissioner does not consider the results to be satisfactory, and admits that they are very probably under-stated. The total cost of taking the Census amounted to £74, 5s. 6d.

The results disclosed a total population in the permanently settled tract, which comprises an area of 1026 square miles, of 327,985 persons; namely, 169,288 males, and 158,697 females, dwelling in 158 villages or collections of villages (*mauzás*), and inhabiting 55,452 houses; average density of the population, 320 per square mile; average number of inmates per house, 5·9. The table on p. 248, exhibiting the area, population, etc. of each of the police circles (*thánás*) comprising the Regulation portion of Jalpáiguri, is taken from the Bengal Census Report of 1872.

No Census was taken of the Western Dwárs portion of the District in 1871-72, for the reason that only about a year previously, in 1870, at the time of the Settlement, a detailed enumeration of the houses and people in each of the *parganás* of this Subdivision had been conducted under the supervision of the special Deputy-Commissioner of the Bhután Dwárs. Soon after the annexation, at the time of the first survey of the Dwárs in 1865-67, a rough Census was taken by the Survey Officers, which returned the population of the Western Dwárs at 49,620 souls. Four or five years later, in 1870, the special Census operations conducted by the Deputy-Commissioner, at the time of the Settlement, returned the population at

[*Sentence continued on page* 249.

AREA, POPULATION, ETC. OF EACH THANA IN THE REGULATION PORTION OF JALPAIGURI DISTRICT, 1872.

Thánd.	Area in square miles.	Number of villages or *mauzás*.	Number of houses.	POPULATION.							AVERAGES ACCORDING TO THE CENSUS OFFICERS.				
				Males.			Females.			Grand Total.	Persons per square mile.	Villages or *mauzás* per square mile.	Persons per village or *mauzá*.	Houses per square mile.	Persons per house.
				Adults.	Children.	Total.	Adults.	Children.	Total.						
Silígurí,	277	26	12,180	20,453	12,672	33,125	20,664	10,773	31,437	64,562	233	·09	2483	44	5·3
Fakírganj,	170	12	9,593	17,338	10,967	28,305	16,992	9,169	26,161	54,466	376	·08	4539	67	5·7
Mainágurí,		2	1,859	3,111	1,741	4,852	3,241	1,338	4,579	9,431			4716		5·1
Bodá,	475	90	24,420	42,999	30,119	73,118	44,919	23,470	68,389	141,507	298	·19	1572	51	5·8
Pátgrám,	104	28	7,400	18,608	11,280	29,888	19,000	9,131	28,131	58,019	558	·27	2072	71	7·8
Total,	1026	158	55,452	102,509	66,779	169,288	104,816	53,881	158,697	327,985	320	·15	2076	54	5·9

Sentence continued from page 247.]
90,063, showing an increase of upwards of 81 per cent. above the figures obtained by the Survey officers. It cannot be expected, however, that the first Census was a very accurate one; and it is possible that at the time it was taken, owing to the recent military operations, many of the inhabitants may have temporarily left their homes. Although the population of the Western Dwárs is still very scanty, being only 48 per square mile, it is increasing at a very rapid rate, owing to immigration from the Districts to the South. The table on p. 250 exhibits the population of each tract of the Western Dwárs, as ascertained in 1870 by the Deputy-Commissioner, in his special Census operations undertaken in connection with the Settlement.

Including, therefore, the permanently settled tracts which were separated from Rangpur District in 1869, and the temporarily settled *parganás* forming the Western Dwárs Subdivision, the entire population of Jalpáigurí District, as indicated above, amounts to 216,525 males, and 201,523 females; total, 418,048 persons, inhabiting 70,246 houses: total revised area, 2906 square miles; average number of inmates per house, 5·8; average density of the population, 144 per square mile.

POPULATION CLASSIFIED ACCORDING TO RELIGION, SEX, AND AGE.—The Deputy-Commissioner's Census of the Western Dwárs in 1870 did not classify the population according to religion. The following paragraphs, therefore, showing the numbers of the population belonging to different religions, refer only to the Regulation or permanently settled portion of the District, the Census of which was taken in 1872. The figures are quoted from the tabular statements in the Bengal Census Report.

The total population of the permanently settled tract of Jalpáigurí, comprising the police circles (*thánás*) of Silígurí or Sanyásíkátá, Fakírganj, Bodá, and Pátgrám, with a total area of 1026 square miles, consisted in 1872 of 327,985 souls; namely, 169,288 males, and 158,697 females. The proportion of males in the total population is 51·6 per cent.; and the average density of the population, 320 per square mile. Classified according to religion and age, the Census gives the following results:—Hindus—under twelve years of age, males 35,911, and females 29,509; total, 65,420: above twelve years of age, males 58,195, and females 58,760; total,

[*Sentence continued on page* 251.

AREA, POPULATION, ETC. OF EACH TRACT OF THE WESTERN DWARS SUBDIVISION OF JALPAIGURI DISTRICT, 1870.

	Area in Square Miles.	Number of Enclosures.	Number of Houses.	Population.							Averages calculated from preceding Columns.			
				Males.			Females.			Grand Total.	Population per Sq. Mile.	Houses per Sq. Mile.	Persons per Enclosure.	Persons per House.
				Adults.	Children.	Total.	Adults.	Children.	Total.					
Bhalká,	119	488	856	2,334	1,126	3,460	2,194	890	3,084	6,544	55	7·19	13·41	7·64
Bhátibárí,	149	458	824	1,956	1,112	3,068	1,917	889	2,806	5,874	39	5·53	12·82	7·13
Baxá hills,	50	68	134	1,005	51	1,056	129	53	182	1,238	24	2·68	18·20	9·24
Baxá,	250	211	580	1,405	701	2,106	1,153	645	1,798	3,904	15	2·32	18·50	6·73
Chakoá-kshattriya,	138	109	277	848	380	1,228	764	343	1,107	2,335	17	2·00	21·42	8·43
Madárí,	194	254	663	1,750	815	2,565	1,742	654	2,396	4,961	25	3·42	19·53	7·48
Lakshmipur,	165	307	577	1,266	576	1,842	1,362	576	1,938	3,780	23	3·49	12·31	6·55
Marághát,	342	653	1846	4,280	1,907	6,187	4,066	1,620	5,686	11,873	34	5·39	18·18	6·43
Mainágurí (*khás*),	211	672	1559	3,143	2,012	5,155	3,246	1,629	4,875	10,030	47	7·39	14·92	6·43
Mainágurí (*ejárá*),	98	1392	6575	11,213	6,659	17,872	11,261	5,253	16,514	34,386	351	67·09	24·70	5·23
Chengmárí,	146	390	903	1,772	926	2,698	1,723	717	2,440	5,138	35	6·18	13·17	5·69
Total,	*1862	5002	14,794	30,972	16,265	47,237	29,557	13,269	42,826	90,063	48	7·94	18·00	6·08

* This was the approximate area in 1870. Amended returns subsequently give the total area of the Western Dwárs at 1880 square miles.

Sentence continued from page 249.]
116,955. Total of Hindus of all ages, males 94,106, and females 88,269; grand total, 182,375, or 55·6 per cent. of the population; proportion of males in total Hindus, 51·6 per cent. Muhammadans—under twelve years of age, males 30,747, and females 24,294; total, 55,041: above twelve years, males 44,044, and females 45,895; total, 89,939. Total of Muhammadans of all ages, males 74,791, and females, 70,189; grand total, 144,980, or 44·2 per cent. of the population; proportion of males in total Musalmán population, 51·6 per cent. Buddhists—under twelve years of age, *nil;* above twelve years, males 8, females *nil;* total 8. Christians—under twelve years of age, males 3, and females 2; total, 5: above twelve years, males 22, and females 9; total 31. Total of Christians of all ages, males 25, and females 11; proportion of males in Christian population, 69·4 per cent. Other denominations not separately classified, consisting of aboriginal people still professing their primitive forms of faith—under twelve years, males 118, and females 76; total, 194: above twelve years, males 240, and females 152; total, 392. Total 'others' of all ages, males 358, and females 228; grand total, 586, or ·2 per cent. of the population; proportion of males in total 'others,' 61·1 per cent. Population of all religions under twelve years of age—males 66,779, and females 53,881; total, 120,660: above twelve years of age, males 102,509, and females 104,816; total, 207,325. Total population of all ages, males 169,288, and females 158,697; grand total, 327,985; proportion of males in total population, 51·6 per cent.

The percentage of children not exceeding twelve years of age, in the population of the Regulation portion of the District, is returned in the Census Report as follows:—Hindus—proportion of male children, 19·7 per cent., and of female children, 16·2 per cent; proportion of children of both sexes, 35·9 per cent. of the Hindu population. Muhammadans—male children, 21·3, and female children, 16·7 per cent.; proportion of children of both sexes, 38·0 per cent. of the total Musalmán population. Christians—male children, 8·3, and female children, 5·6 per cent.; proportion of children of both sexes, 13·9 per cent. of the Christian population. Other denominations—male children, 20·1, and female children, 13·0 per cent.; proportion of children of both sexes, 33·1 per cent. of the total 'other' population. Population of all religions—male children, 20·4, and female children,

16·4 per cent.; proportion of children of both sexes, 36·8 per cent. of the total population. The small proportion of girls to boys, and the excessive proportion of females above twelve years of age to males of the same class, is probably due to the fact that natives consider girls attain womanhood at a much earlier age than boys reach manhood. The proportion of the sexes in the total population, namely 51·6 males and 48·4 females, is probably correct.

INFIRMITIES. — The number and proportion of insane and of persons afflicted with certain other infirmities, in the permanently settled tracts of Jalpáigurí District, is returned as follows in the Census Report:—Insane, males 84 and females 30; total 114, or 0348 per cent. of the population. Idiots, males 4 and females 2; total 6, or ·0018 per cent. of the population. Deaf and dumb, males 51 and females 11; total 62, or ·0189 per cent. of the population. Blind, males 66 and females 31; total 97, or ·0296 per cent. of the population. Lepers, males 136 and females 13; total 149, or ·0454 per cent. of the population. The total number of male infirms amounts to 341, or ·2014 per cent. of the male population; number of female infirms 87, or ·0548 per cent. of the female population. The total number of infirms of both sexes is 428, or ·1305 per cent. of the total population.

I omit the details of the population according to occupation, as the figures returned in the Census Report do not stand the test of statistical criticism.

ETHNICAL DIVISION OF THE PEOPLE.—The Census Report ethnically divides the population of the permanently settled tracts of Jalpáigurí District into the following seven classes:—Europeans, 25; Eurasians, 7; Asiatics, other than natives of India and British Burmah, *i.e.* Chinese and Nepálís, 152; aboriginal tribes, 553; semi-Hinduized aborigines, 148,043; Hindu castes, and people of Hindu origin, 34,225; and Muhammadans, 144,980. Total population of the permanently settled tracts, 327,985.

I take the following list from Mr. C. F. Magrath's District Census Compilation. The list of Hindu castes will be reproduced on a subsequent page, but arranged in a different order from that given here,—as far as possible, according to the rank they hold in local public esteem:—

Name of Nationality, Tribe, or Caste.	Number.
I.—NON-ASIATICS.	
English,	22
Irish,	3
Total,	25
II.—MIXED RACES.	
Eurasians,	7
III.—ASIATICS.	
A.—Other than Natives of India and British Burmah.	
Chinese,	8
Nepálís,	144
Total,	152
B.—Natives of India and British Burmah.	
1. *Aboriginal Tribes.*	
Káchárí,	4
Mech,	40
Murmí,	23
Paháriyá,	33
Uráon,	453
Total,	553
2. *Semi-Hinduized Aboriginals.*	
Bágdí,	146
Baheliyá,	88
Báurí,	2
Bediyá,	108
Chámár,	436
Chandál,	1,980
Dom,	173
Dosádh,	54
Hárí,	4,555
Khyen,	2,380
Koch,	4
Pálí,	128
Rájbansí,	137,135
Mál,	16
Mihtár,	311
Bhuimálí,	178
Pási,	4
Telengá,	345
Total,	148,043

Name of Nationality, Tribe, or Caste.	Number.
3. *Hindus.*	
(i.) Superior Castes.	
Bráhman,	1,275
Rájput,	523
Total,	1,798
(ii.) Intermediate Castes	
Baidyá,	82
Káyasth,	587
Total,	669
(iii.) Trading Castes.	
Agarwálá,	44
Behad,	52
Gandhabanik,	399
Khatrí,	1
Oswál,	53
Subarnabanik,	81
Total,	630
(iv.) Pastoral Castes.	
Goálá,	950
(v.) Castes engaged in preparing Cooked Food.	
Kándu,	640
Madak,	270
Total,	910
(vi.) Agricultural Castes.	
Agurí,	4
Báruí,	406
Kaibartta,	2,970
Koerí,	62
Kurmí,	142
Málí,	500
Sadgop,	276
Total,	4,360
(vii.) Castes engaged chiefly in Personal Service.	
Behárá,	1,478
Dhánuk,	13
Dháwá,	33

Name of Nationality, Tribe, or Caste.	Number.
(vii.) Castes engaged chiefly in Personal Service—*continued.*	
Dhobí,	166
Hajjam or Nápit,	2,505
Káhár,	178
Total,	4,373
(viii.) Artisan Castes.	
Kámár (blacksmith),	511
Kánsárí (brazier),	14
Kumár (potter),	3,215
Sonár (goldsmith),	56
Sunrí (distiller),	1,116
Sutradhar (carpenter),	73
Telí (oilman),	2,728
Total,	7,713
(ix.) Weaver Castes.	
Jugí,	813
Kapálí,	838
Tántí,	4,034
Total,	5,685
(x.) Labouring Castes.	
Beldár,	298
Chunárí,	7
Nuniyá,	1
Total,	306
(xi.) Castes engaged in selling Fish and Vegetables.	
None.	
(xii.) Boating and Fishing Castes.	
Jaliyá,	1,370
Málá,	24
Mánjhí,	227
Patní,	35
Total,	1,656
(xiii.) Dancer, Musician, Beggar, and Vagabond Castes.	
Baití,	20
Kuálí,	260
Total,	280
(xiv.) Persons enumerated by Nationality only.	
Assamí,	16
Madrásí,	3
Total,	19
(xv.) Persons of Unknown or Unspecified Castes,	2,806
Grand Total of Hindus,	32,155
4. *Persons of Hindu Origin not recognising Caste.*	
Vaishnav,	1,877
Sanyásí,	189
Native Christians,	4
Total,	2,070
5. *Muhammadans.*	
Juláhá,	17
Páthán,	56
Shaikh,	4
Unspecified,	144,903
Total,	144,980
Total of Natives of India,	327,801
Total of Asiatics,	327,953
Grand Total,	327,985

Aboriginal Tribes. — The Mechs of Jalpáigurí principally inhabit the Western Dwárs portion of the District. They are the western branch of the great Káchárí tribe, and are most numerous

in the Districts to the east of Jalpáigurí. In the Eastern Dwárs they are called indiscriminately either Mech or Káchárí; and in the Assam Districts they are called Káchárí alone, losing the name of Mech altogether. These people are of very migratory habits, seldom staying in one place or cultivating the same fields for more than two or three years, a practice which is dictated, or at least aided, by the large amount of rich virgin soil at their disposal. They prefer cultivating clearances in the forest when available, and grow a considerable deal of cotton in addition to the ordinary crops of rice, mustard-seed, etc. The Mechs are an able-bodied, well-to-do class of people, and well-behaved, cases of serious crime being of very rare occurrence among them; they are, however, extremely superstitious. They are very few in number in the permanently settled portion of the District, the Census Report returning their number as only 40. In the Western Dwárs, however, next to the Rájbansís, they are the most numerous section of the population. The Deputy-Commissioner's Census, taken in 1870, at the time of the Settlement of the Dwárs, returns the number of adult male Mechs in the Western Dwárs at 3841, out of a total adult male population of 30,972. A detailed account of the Mechs inhabiting the tract running along the foot of the Bhután, Sikkim, and Nepál hills, will be found in my Statistical Account of Dárjíling District (*ante*, pp. 66–80).

THE KOCHS, or Rájbansís as they are now called, may be briefly mentioned among the semi-aboriginal tribes, although they are now recognised as a distinct caste of Hindus. The Koch race first came prominently into notice about the close of the fifteenth or the beginning of the sixteenth century, when Hájo established the Koch kingdom upon the downfall of the more ancient Hindu kingdom of Kámrúp. Bráhmanism was introduced among the people in the time of Visu, Hájo's grandson, who, together with his officers and all the people of condition, embraced the new religion. The name of Koch was abandoned by the converts, who assumed that of Rájbansí, literally 'of the royal kindred.' The Kochs or Rájbansís form by far the majority of the Hindu population of Jalpáigurí District. In the Regulation or permanently settled part of the District, they number altogether 137,267, out of a total Hindu population of 182,375. In the Western Dwárs, the Deputy-Commissioner's Census of 1870 returns the number of Rájbansís at 20,413 male adults, out of a total male adult population of 30,972.

A more detailed description of the Kochs will be found in my Statistical Account of Kuch Behar (*post*), which State may be regarded as the present nucleus of the race.

HINDU CASTES.—The following is a list and very brief account of sixty-five Hindu and semi-Hinduized castes met with in the permanently settled *parganás* of Jalpáiguri District, arranged as far as possible in order of precedence; but as caste rules are not observed so strictly here as in the Districts to the south, the social status of the great majority of the Hindu population is pretty much on an equality, with the exception of the very highest and very lowest classes. The occupations mentioned are more the hereditary employments assigned to the respective castes, than those upon which they are dependent for a livelihood. The Deputy-Commissioner estimates that forty-nine out of every fifty people in the District are engaged in agricultural pursuits, more or less. Even the castes who are hereditarily attached to occupations unconnected with agriculture, either possess land, or hold leases of land, which they cultivate themselves, and on the produce of which they mainly depend for subsistence, their caste occupation being looked upon merely as a subsidiary means of obtaining a livelihood. The figures indicating the number of each caste in the following list are taken from Mr. C. F. Magrath's Census Compilation, which applies only to the permanently settled tracts of Jalpáiguri District:—

(1) Bráhman; the sacerdotal caste in the Hindu social system. The Deputy-Commissioner states it is supposed that about three hundred Bráhman families of immigrants are living among the village people, and have permanently settled in the District. The majority of them have become *jotdárs*, or small landholders, and live from incomes derived from the produce of their lands. Some of them cultivate their holdings by means of their servants or followers, while others lease out their lands; some also are employed as rent collectors and *zamíndárí* clerks by the larger landholders. Besides the Bráhmans who have permanently settled in the District, there are about forty or fifty families who have temporarily established themselves in Jalpáiguri town; these are employed as pleaders in the Courts, revenue agents, law agents, and as subordinate judicial and executive officers in the various Government Courts and offices. Mr. Magrath's Census Compilation returns the number of Bráhmans in the Regulation part of the District at 1275. (2) Kshattriya; the second or warrior caste in the ancient Hindu social system. As

stated in previous District Accounts, it is believed that at the present day there are no pure Kshattriyas in Bengal, although several castes lay claim to this rank. The caste returned as 'Khatrí' in the Census Report is the great trading caste of Northern India, but Mr. Magrath's Compilation returns only 1 Khatrí for Jalpáigurí District. The Deputy-Commissioner, however, in his report to me in 1870, states that about five hundred Kshattriya families are said to have permanently settled, and to have become a part of the fixed population of the District. The majority have acquired land, which they cultivate either themselves or by means of hired labour, some of them being well-to-do *jotdárs*. Others are employed as rent collectors, clerks, messengers, or armed guards (*barkandázs*); but by far the greater portion of them live on their own lands as *jotdárs*, or as lessees under *jotdárs*. (3) Rájput; employed in military service, and as guards, policemen, and doorkeepers. From their military occupation they claim the rank of Kshattriyas, which is generally accorded to them. Number of Rájputs in the permanently settled *parganás* of Jalpáigurí, 523. (4) Baidyá; hereditary physicians by caste occupation, but many of them have now abandoned their traditional employment, and taken service in Government or private employ; 82 in number. (5) Káyasth; the writer caste of Bengal, employed as writers or clerks in Government or private service; 587 in number. (6) Agarwálá; up-country traders or merchants, claiming to belong to the great Vaisya or trading caste of ancient India, which is now believed to be extinct; 44 in number. (7) Behad; another up-country trading caste; 52 in number. (8) Oswál; also an up-country trading caste; 53 in number.

SUBORDINATE CASTES.—(9) Nápit or Hajjam; barbers, but most of them also cultivate land; 2505 in number. (10) Kámár; blacksmiths, they are also cultivators holding *jots* of their own, and leases under *jotdárs*; 511 in number. (11) Kumár; potters, but most of them also hold small plots of land; 3215 in number. (12) Kánsárí; braziers and coppersmiths; 14 in number. (13) Gandhabaník; grocers and spice dealers, most of them also possessing small landed property; 399 in number. (14) Telí or Tilí; dealers in oil-seeds and oil-pressers by caste occupation; they also cultivate land, many of them being well-to-do *jotdárs;* 2728 in number. (15) Sadgop; the first of the cultivating castes; 276 in number. (16) Agurí; a respectable mixed cultivating caste; 4 in number. (17) Báruí; growers and sellers of *pán*, also ordinary cultivators; 406 in number. (18) Kaibartta;

the majority are landholders or cultivators, about 100 of their number being well-to-do Hindus; those who are not cultivators are employed as cooks and servants in the better-class families of Hindus; 2970 in number. (19) Goálás; cowherds and dealers in milk, *ghí*, and curds; most of them possess lands which they cultivate themselves. A few of them are said to be very wealthy, and own several hundred head of buffaloes and cattle; 950 in number. (20) Málí; gardeners, flower sellers, and makers of toys and images of the gods out of *solá* (pith); most of them have also a small plot of ground which they cultivate themselves; 500 in number. (21) Kándu; sellers of parched rice, etc.; 640 in number. (22) Bhujri; preparers and dealers in parched grain, rice, etc.; a few of them also possess land. This caste is not separately returned in the Census Report, but the Deputy-Commissioner reports that two hundred or three hundred families live in the District. It is probably identical with the foregoing. (23) Madak; sweetmeat makers and confectioners; 270 in number. (24) Vaishnav; not a caste, but a religious class of Hindus, professing the principles inculcated by Chaitanyá, a Vishnuvítí religious reformer of the sixteenth century; 1877 in number. (25) Sanyásí; not a caste, but a sect of Sivaití religious mendicants; 189 in number. (26) Koerí; cultivators; 62 in number. (27) Kurmí; cultivators; 142 in number. (28) Rájbansí; 137,135 in number. (29) Pálí; 128 in number. (30) Koch; 4 in number. These three last are practically one and the same people, the Rájbansís and Pálís being offshoots of the Koch tribe, who have abandoned the name of Koch on their conversion to Hinduism. They are now by far the most numerous section of the Hindus, forming no less than 75·2 per cent. of the entire Hindu population in the permanently settled tracts of the District. In the Western Dwárs, according to the Deputy Commissioner's Census in 1870, the Rájbansís number 65·9 per cent. Their occupation is almost entirely that of ordinary cultivators. This caste has already been alluded to (*ante*, p. 255). (31) Tántí; weavers; 4034 in number. (32) Jugí; weavers; 813 in number. (33) Kápálí; jute spinners and weavers; 838 in number. (34) Subarnabanik; merchants, bankers, and dealers in gold and silver; 81 in number. (35) Sonár; goldsmiths, jewellers, and money changers; 56 in number. (36) Behárá; palanquin bearers, labourers and cultivators; 1478 in number. (37) Dhobá; washermen by caste occupation, but the majority of them also hold small patches of land, which they cultivate; 166 in number. (38) Surí or Sunrí; wine sellers and

distillers by caste occupation, but many of them have now abandoned their hereditary employment, and have taken to grain dealing, petty shopkeeping, etc.; some of them are also *jotdárs* and cultivators; 1116 in number. (39) Káhár; an up-country caste, employed as palanquin bearers, labourers, cultivators, and also as domestic servants in respectable families; 178 in number. (40) Sutradhar; carpenters; 73 in number. (41) Dhánuk; labourers, cultivators, and domestic servants; 13 in number. (42) Dháwá; labourers, cultivators, and domestic servants; 33 in number. (43) Chunárí; lime burners; 7 in number. (44) Nuniyá; a Behar caste of salt workers; 1 in number. (45) Beldar; day-labourers and cultivators; 298 in number. (46) Chandáls; cultivators, fishermen, and labourers, 1980 in number. (47) Jaliyá; fishermen by caste occupation, but most of them also possess land, on which they mainly depend for a subsistence; 1370 in number. (48) Málá; fishermen, boatmen, and cultivators; 24 in number. (49) Manjhí; not a caste, but a class of boatmen who act as helmsmen; 227 in number. (50) Pátní; ferrymen; 35 in number. (51) Baití; matmakers and musicians; 20 in number. (52) Kuálí; dancers and musicians; 260 in number. (53) Bágdí; labourers and cultivators; 146 in number. (54) Baheliá; labourers and cultivators; 88 in number. (55) Baurí; labourers and cultivators; 2 in number. (56) Chámár; leather dealers and shoemakers; 436 in number. (57) Dom; matmakers, cultivators, and labourers; 173 in number. (58) Dosádh; cultivators and labourers; 54 in number. (59) Hárí; sweepers and swineherds; 4555 in number. (60) Khyen; cultivators and labourers; 2380 in number. (61) Mál; snake charmers; 16 in number. (62) Telengá; labourers and cultivators; 345 in number. (63) Pásí; toddy sellers; 4 in number. (64) Mihtár; sweepers and swineherds; 311 in number. (65) Bhuimálí; sweepers and menial servants; 178 in number.

THE MUHAMMADANS, who number 144,980, or 44·2 per cent. of the population of the District, nearly all subsist, like the Hindus, by husbandry. Three or four wealthy Musalmán landed families have rent-rolls of about Rs. 4000 or Rs. 5000 (£400 or £500) per annum. About two hundred of them are well-to-do *jotdárs*, in possession of incomes from their *jots* varying from Rs. 100 to Rs. 1000 (£10 to £100) per annum; but the great majority of them are small *jotdárs*, who cultivate their little plots of from 10 to 30 *bighás* (3⅓ to 10 acres), the produce of which is sufficient for the wants of their families. The Musalmán and Rájbansí population live on good

terms in the same tracts side by side, and intermix socially with each other. The Deputy-Commissioner states that it is not unusual to find Muhammadan and Rájbansí families dwelling together in the same homestead, although in separate houses. In the Western Dwárs Subdivision the Musalmáns are not nearly so numerous as in the Regulation part of the District; according to the Deputy-Commissioner's Census of 1870, out of a total male adult population of 30,972, they only numbered 3827, or 12·3 per cent.

Religious Division of the People.—Classified according to religion, the population of the permanently settled portion of the District consists of Hindus and Muhammadans in almost equal numbers, with a very small sprinkling of Bráhma Samáj followers, Christians, and others not separately classified according to religion. The Census Report of 1872 thus returns the population of different religions in the Regulation part of the District. The Hindus, as loosely grouped together for religious purposes, number 94,106 males and 88,269 females; total, 182,375, or 55·6 per cent. of the population. No separate return is given in the Census for the number of Bráhma Samáj followers, or members of the reformed theistic sect of Hindus, who are probably included with the general body of orthodox Hindus. A Samáj was established at the Civil Station in 1869, with originally five members, which by the end of 1870 had increased to 18, who met twice a week in a building of their own for the purposes of worship. The members belong to the upper ranks of society, several of them being respectable ministerial officers of the Government Courts, and three of them teachers in the Government school. The Muhammadans number 74,791 males and 70,189 females; total, 144,980, or 44·2 per cent. of the population. At the present day, the religion of Islám has ceased to make any further progress in the District. The Deputy-Commissioner reports that there are no Wahábís or Faráizis in Jalpáigurí, and that no new fanatical sects are springing up among the Muhammadan population. The Christian population of the District consists of 25 males and 11 females; total, 36, of whom 32 are Europeans or Eurasians, only 4 being returned as native Christians. Other denominations, not classified separately according to religion, are represented by 358 males and 228 females; total 586, or ·2 per cent. of the population.

Distribution of the People into Town and Country.—The population of the District is entirely rural, the Station of Jalpáigurí

being the only place which can be regarded in any sense as a town. The Deputy-Commissioner is of opinion that there are not a dozen villages in the whole District which contain upwards of a hundred and fifty or two hundred households. There seems to be no tendency on the part of the people to gather into towns, or into seats of industry or commerce. The population is a purely agricultural one, and the Deputy-Commissioner estimates that forty-nine out of every fifty persons live more or less by cultivation. With the exception of the higher classes, even the castes who follow hereditary fixed occupations either possess land of their own or hold leases of land, on the produce of which they mainly depend for subsistence, their caste occupation being looked upon merely as a subsidiary means of obtaining a livelihood. Small periodical village markets are held at different spots all over the country, and a few petty trading shops are also scattered here and there.

JALPAIGURI TOWN, the Administrative Headquarters of the District, is situated on the west or right bank of the Tístá river, in 26° 32′ 20″ north latitude, and 88° 45′ 38″ east longitude. It is only since the creation of the District in 1869 that the town has become of any importance; since that date it has been rapidly advancing in size and importance, and its population has doubled within the last few years. It will, doubtless, still further increase in prosperity on the opening of the new Northern Bengal State Railway. In 1870, the Deputy-Commissioner estimated the population of the town to consist of between four and five thousand souls, including the regiment of native infantry in the cantonments. The place contains ten or twelve small but respectable shops in which articles of English manufacture are sold, besides eighty or a hundred petty shops for the sale of brass and iron domestic utensils, and of the ordinary articles of native consumption. Almost all these shops are kept by foreigners from Behar and the North-Western Provinces. Some eight or ten wealthy Márwárí traders also reside in the town, and carry on extensive dealings in cloth and country produce. Although Jalpáigurí has not been constituted a municipality, a staff of sweepers is maintained to keep the station clean. The town is perfectly dry during the cold and hot seasons, and is very healthy, considering the climate and locality.

MILITARY CANTONMENTS.—Jalpáigurí cantonment is situated on the west or right bank of the Tístá river, just to the south of the

Civil Station, from which it is separated by a small stream, called the Kharlá. The land is high and the soil sandy and firm, the spot being well drained. The cantonments are occupied by a regiment of native infantry, the regimental lines consisting of mat huts thatched with grass. The men sleep on bamboo platforms raised two feet above the ground. A small regimental *bázár*, which is kept scrupulously clean, is situated within cantonment limits. Between 1816 and 1828, there was a military cantonment at Titályá, which is now only used as a camping-ground. During the Bhután war, there was a cantonment at Patlákháwá in the Western Dwárs, where great sickness and mortality occurred among the troops; it is now abandoned. Another cantonment was established at Jalpesh, near Mainágurí, during the war, but it has also been abandoned. The cantonment at Baxá is situated inside a rough fort on a small gravel plateau, in a valley in the lower range of the Bhután hills, about two miles from Sontrábárí, at the base of the mountains, and six miles from the Bhután frontier. Since the annexation of the Bhután Dwárs in 1864, a full regiment of native infantry has been stationed here. Two pickets are attached to the fort, on spurs at a higher elevation than the fort itself. The troops are all lodged in the fort, in barracks constructed of rough timber, with a grass thatched roof. The height of the plateau on which the cantonment is situated is about 1800 feet above sea level. No water is obtainable on the summit, and the necessary supply has to be brought from two perennial streams, one of which issues from the base of the plateau. No spirit shop exists nearer than Sontrábárí, at the foot of the hills, where native spirit is manufactured and sold. Two regimental *bázárs* are situated to the west of the fort, consisting of bamboo and grass huts. About half a mile to the north is a considerable Bhutiá village, with about two hundred inhabitants. A staff of eight or nine sweepers is maintained to attend to the general conservancy of this cantonment.

Village Officials.—The following brief account of the status and duties of the different officials met with in Jalpáigurí District is quoted from a report by the Deputy-Commissioner on the indigenous agency employed in taking the Census:—'The *pradháns* are the *zamíndárs*' servants, appointed to assist the *tahsíldárs* or rent collectors, and generally to look after their masters' interests. Their position gives them weight with the villagers; and apart from the small salary sometimes (but not always) given, amounting at the

outside to Rs. 3 (6s.) per mensem, they also receive remuneration in the shape of presents given on occasions of feasting. The origin of the appointment in early days seems to have been the object of having some person to keep the cultivators together in newly settled tracts, and to see that the rents were regularly paid. The post used to be thought so much of, that it was formerly never bestowed without a handsome *nazar* or present being given to the *zamíndár*, in some cases elephants being given by candidates for the office. The appointment was ordinarily hereditary, and son succeeded to father, provided he was eligible, and able to give what was considered a sufficient *nazar* by the *zamíndár*. At the present time things have much changed, and the importance of the post has decreased; but the heirs of original wealthy *pradháns* are still to be found holding the office, and it is customary to give the appointment to the duly qualified heir of a deceased *pradhán*. *Nazars* still continue to be given, but on a much smaller scale than formerly. The appointment of *pradhán* rests entirely with the *zamíndár*, who also can dismiss at pleasure. This latter power, however, is never exercised except on the grounds of incapacity; and when a new man has to be appointed, the opinion of the *rayats* is to a certain extent consulted. The *jotdárs* of Jalpáiguri are the same class as those of the same name in Dárjíling; save that in the permanently settled tracts of Jalpáiguri, the long standing of the tenure, and the non-liability to revision of Settlement on the part of Government, have given a highly substantial character to the *jotdári* right. *Patwáris* proper do not exist in Jalpáiguri District. Two persons bearing that title are found in Bodá *parganá*, who are appointed for the purpose of keeping the *zamíndár's* accounts; but their office is not an hereditary one, and they are mere *muharrirs* or clerks. The title of *faujdár* is found in the Dwárs surviving the Bhutiá rule, but the office now exists only in name. The duty of the *faujdár* was formerly to bring before the *ámín*, or officer below the *subah* or governor, the parties in assault cases, disputes, or breaches of morality. The appointment was only so far hereditary that an eligible son, if the *subah* was so inclined, did occasionally succeed his father. As a class, these *faujdárs* could neither read nor write, and were paid by receiving *jots* of land. There are no standing *panchávats*, or indigenous village courts, maintained in this part of the country. The institution is of course known here as elsewhere, but the members are elected for each occasion as necessary, and do not retain any permanent authority in regard to general matters.'

The following paragraphs respecting the *parganás* now comprising the Regulation part of Jalpáigurí District, with an account of the places of interest, etc. in each, are extracted in a condensed form from Dr. Buchanan-Hamilton's MS. Account of Rangpur (1809).

'THANA PATGRAM.—This jurisdiction comprises an area of about 82 square miles, and, except at one corner, is everywhere surrounded by the territory of the Rájá of Kuch Behar. This is perhaps on the whole the highest part of the District, and although situated not far from the Tístá, it suffered no inconvenience from the great floods of 1194 Bengal Era (1787 A.D.). The soil is remarkably light, and iron ploughshares are unnecessary. No place in this division is entitled to the appellation of town. The two most celebrated places of worship are (1) a hut called Kadam Rásul, in which, however, there is no mark of the prophet's foot, as one would suppose from the name, but which is frequented by all persons in distress, both Muhammadans and Hindus; (2) the Dhallá river, where the Baruní festival is observed at a place about four miles below Pátgrám village, on which occasion about 2000 people bathe in its waters. The village deity is Páteswárí, a female spirit delighting in the blood of goats, from whom it is said that the name of the tract is derived. The only remains of antiquity are two small forts, and these not of very ancient date. After an invasion of the country by the Bhutiás, and their defeat by a Muhammadan general named Máajam Khán, that officer erected two fortified posts at Pátgrám, one on each side of the Dharlá. Both forts are called Mandamala, and are small, square redoubts, with a bastion at each angle. The remains of a fortified camp of the same general exist about a mile east of these forts.

'THANA FAKIRGANJ.—This jurisdiction, which is situated west from Pátgrám, is entirely separated from it by a narrow strip of Kuch Behar. One detached portion is situated in the centre of Bodá, while another is removed to a great distance on the frontier of Kuch Behar and Bhután. Independently of these detached portions, this jurisdiction is a narrow strip of about 30 miles in length, while its total area may be about 184 square miles. The village of Fakírganj, from whence it derives its name, is in the jurisdiction of Bodá. The northern part of this division is entirely covered by forest. The soil is everywhere so light that iron ploughshares are unnecessary. Although the house of the Baikunthpur Ráikats or Rájás is situated in this division, yet it contains (1809) no dwelling-house of brick, and only one small domestic place of

worship of that material. The chief deity of the villagers is Burí Thákuráni, the goddess of the Tístá. The Baikunthpur Ráikats have erected many small forts or redoubts in Fakírganj division, the ruins of which may be still traced; but none of them are in any way remarkable. They all have bastions at their angles.

'DIVISION OF SANYASIKATA.—This jurisdiction, which comprises the other division of the Ráikat's estate, is somewhat of a triangular form, extending towards the south-east in a long acute angle. In the centre of Sanyásíkátá is a small territory belonging to the Deb Rájá of Bhután. The soil is so light that no iron is used in the plough. In some places, immediately under the surface, there is a kind of black earth called buffalo sand (*maheshbala*), and wherever this is found the land is very sterile. On digging for seven or eight cubits, sand containing water-worn pebbles is usually found. There are no marshes of any considerable extent. The northern extremity of the division is overgrown with woods and reeds. There are no brick buildings in the tract, nor is there any town. The Muhammadans have no place of worship of any importance. The only remarkable Hindu temple is that from whence the tract derives its name. Tradition has it that when the first of the Ráikats, Sira Kumár, was building a fort, the workmen in digging the foundations came upon a religious ascetic (Sanyásí) who was passing his time underground in devout retirement. This person was wounded by the diggers before they were aware of his presence; but he made no complaint, and only requested to be covered up again. This was accordingly done forthwith, and a monastery (*akhrá*) for persons of his order was built on the spot. The monastery is under the direction of a superior, who has the title of *mahant*. About two hundred people annually celebrate the Baruní festival by bathing in the Karátoyá where it passes through this jurisdiction. The most common god of the villagers is Sanyásí, the ascetic who passed his time in devout meditation underground, and who has now received the title of *thákur* or deity. In this division also the Ráikats have constructed many small mud forts, which are now in ruins.

'Partly in this jurisdiction and partly in that of Bodá are the ruins of the city of Prithu Rájá, one of the kings of the earliest Kámrúp dynasty. The city is situated some distance to the east of the Karátoyá river, and a small stream, the Tálmá, runs through it from north to south. The city consists of four concentric enclosures. The innermost is said to have been the abode of the Rájá, and

appearances justify the supposition. It is a parallelogram of about 690 yards from north to south, by half as much from east to west; but at the north end, a small portion is cut off from its east side, in order to secure the place by an earthen rampart from any attack that might be made from a large tank which is adjacent. The defence of the other parts of the royal residence has been a brick wall. Near the middle of the area is a small tank, with a heap of bricks at each end. In the south-east corner is another tank, and one heap of bricks. In the south-west corner are two heaps containing bricks. All these heaps are small, and have probably been private places of worship; all the other buildings probably consisted of thatch huts. There is not the smallest trace of either taste or magnificence, while the defences seem to indicate that the government of the Rájá was insecure. The tank adjacent to the citadel or palace is a considerable work, and from the great height and width of the banks thrown out, must be deep. It extends about eight hundred yards from north to south, and seven hundred yards from east to west. At the north and south ends it has had two *ghâts* or descents, and in the east and west sides it has had three, all paved with brick. The water is still clear, and, owing probably to the bottom being of sand, few weeds grow in it, which the natives attribute to the holiness of the place. The part of the bank that adjoins the palace is overgrown with trees and bushes, and is supposed to be still the abode (*sthán*) of Prithu's spirit. The Rájá was attacked by an impure tribe of Kichaks or gipsies, and, afraid of having his purity sullied by contact with them, he precipitated himself into the tank at this spot. A flag is hoisted to denote that the ground is holy; and on my approaching, my guides bowed to the ground, and called upon Mahárájá Prithu by name.

'The inner city, which surrounds the palace and great tank, is about 1930 yards from east to west, and 345 yards from north to south. Where I passed the north, east, and west faces, they consisted of a brick rampart and a narrow ditch without any flanking defences, and in an extremely ruinous condition; still, however, in some parts the bricks of the facing retained their position. Where I crossed the southern face, it consisted of a very wide ditch and a strong rampart of earth. The citadel is not in the centre of this inner city, but is placed nearest to the north and west sides.

'The middle city extends about 3530 yards from east to west, and 6350 from north to south. It is surrounded by a ditch and

rampart of earth; but its north face, where the Tálmá enters its ditch and flows along it, is strengthened, so far as I traced, by an additional rampart. Its western area is wider than its eastern, while in the south it is not so wide as in the north. Near its southern end is a tank called Bághpukur, where the Rájá kept some tigers. In the northern area are shown two small heaps of bricks, which are called the house of the Rájá's minister; but from their size they could only have served as the private places of worship of such a personage. In both the inner and middle cities there have been subdivisions, separated by ramparts and ditches, both running parallel to the chief defences of the place, cutting the former at right angles; which probably divided the city into many wards or quarters.

'The outer city is surrounded by a low rampart and ditch, and is supposed to have been occupied by the lowest class of the population, on which account it is called the Háríghar, or sweepers' quarter. It extends 300 yards from the western rampart, and 570 yards from the southern rampart of the middle city. Its extent on the east side escaped my notice. Neither did I ascertain the extent of this outer city towards the north. I could not see it from the rampart of the middle city, and was told that it was at such a distance as to render a day's halt necessary if I intended to view it, and a day's halt was impracticable. My guides said that the total length of the outer fort from north to south was six miles, which seems probable.

'There is no reason to think that in the whole city there was any public building, either religious or civil, that deserved notice; or any work of considerable magnitude, except the defences and the tank. This shows either that the people were in a very rude condition of society, or that the urgency of the State required that its whole means should be exhausted in the defence of the city. The whole seems to have been constructed at an early period, before the knowledge of the art of war had made any considerable progress, as there is nothing like towers, bastions, or any part that can protect another, in the defences. This, however, does not indicate very great antiquity, as the city of Kamatápur, destroyed at the end of the fifteenth or beginning of the sixteenth century, is in a similar state. I cannot account for one feature which I observed in all the sides of the outer city. There are several trenches of considerable depth, and perhaps twenty feet wide, which seem to extend round the whole, parallel to the ditch of the middle city,

and distant from each other about forty or fifty feet. The earth which has been taken from the trenches has been thrown on the intermediate spaces, which, although evidently raised, are on a uniform level. They could, therefore, scarcely have been intended for defences; nor is it probable that regular streets would have been formed in the meanest part of the city, while no traces of such are perceptible in the quarters inhabited by persons of rank.

'Besides the city, several other works in the Sanyásíkátá division are attributed to the family of Prithu Rájá, or to his servants. At Dhubní, a little to the north and west of the city, is a tank where the Rájá's washerman is said to have dwelt, and a square mound containing some bricks is pointed out as the remains of his house. Many other small tanks are attributed to this Rájá; and amongst them, one situated some miles east of the city, called Jharpukurí, near which are the ruins of some small brick buildings. Several roads are also said to have been constructed by Prithu Rájá.

'DIVISION OF BODA.—This division is of unusual size, and contains an area as large as both the two last-mentioned jurisdictions. The large proportion of it that is laid waste by water is chiefly owing to the great channel of the Old Tístá, which passes through it for twenty-four miles. The soil is so light as to require no iron in the plough. There is one small *sál* forest on the Karátoyá, but the timber is stunted. There are no buildings of brick, except three small temples which are partly constructed of that material; $\frac{15}{16}$ths of the houses are thatched with fine grass (*ulu*), and $\frac{1}{16}$th with reeds (*birna*); $\frac{1}{8}$th of the houses have mat walls, of which about one hundred are entirely, and about three hundred partly, supported by wooden posts; $\frac{7}{8}$ths of the houses have walls of reeds, of which $\frac{5}{8}$ths are plastered inside with clay. No *zamíndár* resides in this division.

'Kumáríkot, called also Govindganj, is a small town containing several good houses. It is the residence of the native law and police officers, and also of the officers employed by the Rájá of Kuch Behar to manage his affairs; it may contain about two hundred houses. Pachagarh is a great mart for the manufacture of sackcloth, and may contain about a hundred and fifty houses. Sáldángá contains perhaps two hundred houses. Deviganj is a thriving place of about two hundred and fifty houses, most of which had lately been burnt when I saw it; but this is a common accident. The chief place of Muhammadan worship in the division

is the thatched monument of a reputed saint. The common deities of the village people are Kálí, the wife of Siva, the god of destruction; Sanyásí Thákur, the pious ascetic who passes his time in meditation underground; Burí Thákuráni, the goddess of the Tístá; her son, Magar, the crocodile, and two others named Rájádhoí and Sanáí. The two principal Hindu places of worship are a thatched temple in honour of Siva at Bhajanpur, and a small brick temple of Bodeswarí, a goddess of malignant attributes, from whom the division derives its name. This latter temple is possessed of a considerable endowment from the Kuch Behar Rájás, who have twice rebuilt it. There remain no traces of the original building, erected by a Buddhist Rájá for his family deity; but the temple is situated in the centre of a fort, where the Rájá is said to have lived. It is a square of about two miles in circumference, and is surrounded by a wide ditch and high earthen rampart, without towers, or any of the other improvements in military architecture. No tradition remains concerning the time when this Rájá lived. I saw no heaps of bricks, nor other traces of buildings.

'Eight *kos* north from Kumáríkot is a tank called Husáin-dighí, which is said to have been dug by Husáin Sháh, the Afghán ruler of Bengal, who overthrew the kingdom of Kámrúp, and who was born in the neighbouring village of Devnagar. Near Kumáríkot is a small square fort, with bastions at the corners, which is called Mughulkot [illegible] is said to have been occupied by a Muhammadan of[illegible] the time of the conquest of this part of the country unt[illegible] blishment of the British Government rendered such petty defences unnecessary.'

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the ordinary copper and brass household utensils. It is very seldom that there is any furniture at all in an ordinary cultivator's hut, beyond a few metal plates, cups, and cooking utensils; his bed generally consists of straw laid on the ground, but sometimes he has a raised bamboo platform or *machán* for sleeping on, and a piece of plank or a mat to sit upon. The ordinary food for both the shopkeeping and cultivating classes is rice, vegetables, and fish; and for those who can afford it, meat and curds. The Deputy-Commissioner estimates the cost of the food and other requisites necessary for the support of an ordinary-sized household of a shopkeeper's family to be as follows:—Rice, Rs. 4 (8s.); pulses, 8 *ánnás* (1s.); vegetables, 8 *ánnás* (1s.); oil and *ghí*, R. 1 (2s.); turmeric and spices, 8 *ánnás* (1s.); fish or meat, R. 1 (2s.); tobacco, etc., R. 1 (2s.); cloth, etc., R. 1. 8. 0 (3s.); total, Rs. 10. 8. 0 (£1, 1s. 0d.) per month. The living expenses for the family of an ordinary peasant, supposing he had to buy all his requisites, may be set down at from Rs. 7 to Rs. 8 (14s. to 16s) per mensem. The women and children generally collect the fuel they require, and catch what fish they can. The rice, tobacco, and vegetables are the produce of their own fields, and there is very little which has to be actually purchased.

AGRICULTURE: RICE CULTIVATION.—Rice forms the staple product of Jalpáigurí District, and is divided into three principal varieties, known as *áus*, *báo*, and *áman* or *haimantik*.

The *áus* rice crop is subdivided into two kinds, one of which is sown in March and April, and reaped in June and July. It is sown broadcast on high lands, and does not require much rain. As soon as the young shoots are four or five inches high, the field is thinned, by a large wooden rake (*bidá*) being dragged across it by a pair of bullocks, which process also removes most of the weeds at the same time. When the plants are about ten inches high, the field is again thinned in the same manner, after which the crop requires no further attention until it is ready for reaping. The other and more important *áus* crop is sown in April and May, and reaped in August and September; this crop is called *bhadaí áus*, after the name of the Hindu month (Bhádra) in which it is reaped. It is sown on high lands, and is cultivated in exactly the same manner as the early rice crop, except that it requires more moisture. The *áus* rice is an inferior grain to the *áman* or *haimantik* winter rice, nor is it cultivated to anything like the same extent as that crop.

Karmá rice is a species of *áus*, but instead of being sown broadcast, it is first grown in nurseries, transplanted in July and August, and reaped in November and December.

The *báo* rice is sown broadcast on low-lying lands at the same time as the *bhadaí áus*, but it takes a longer time in coming to maturity, and is not reaped until December and January. Very little of this crop is cultivated in Jalpáigurí District.

The *áman*, *haimantik*, or *sálí* rice, for it is called by either of these names, is the most important crop of the District, and forms the great winter rice harvest. It is first sown broadcast in nurseries in May and June; from about the middle of July to the middle of September it is transplanted into fields which have been specially prepared for its reception, the ground having been thoroughly ploughed, and on the setting in of the rains worked up into a soft, pulpy mud, which effectually rots all the weeds, each field being surrounded by a small ridge of earth so as to keep in the water. The young plants are put into the ground by hand, two or three together, in holes from six to nine inches apart. In order to the successful cultivation of this crop, it is essential that there should always be water lodged about the roots of the plants. Should the rainfall be insufficient for this, the cultivators on the east bank of the Tístá river, towards the Bhután hills, generally dam up a neighbouring stream, and divert a portion of the water to their fields by means of small irrigation drains cut for the purpose. The *áman* rice crop is reaped during December and January.

The Deputy-Commissioner, in his report to me in 1870, states that it does not appear that any improvements have taken place of late years in the quality of rice grown; but that in the Western Dwárs portion of the District, since its annexation in November 1864, the area under rice cultivation has very considerably extended, owing to the influx of new settlers from Kuch Behar State and Rangpur District. The names of the rice plant in the various stages of its growth are as follow:—Seed paddy is called *bichhán dhán;* the young transplanted shoots are called *roá;* unhusked rice or paddy, *dhán;* husked rice, *chaul;* cooked rice, *bhát.* A fermented liquor called *mad* is made from rice by the Mechs and other primitive tribes, principally for their own consumption. It is made by simply adding water to cooked rice, and assisting the process of fermentation with the roots of certain herbs. Licences are also taken out on the monthly tax system for preparing this

sort of spirit, in the portion of the District situated between the Jáldhaká and Sankos rivers. In the remainder of the District, to the west of the Jáldhaká, the fixed duty system is in force, there being a distillery at the station of Jalpáigurí. The spirits at the distillery are made in much the same way as that followed by the Mechs, mentioned above. The cooked rice, while hot, is placed in large earthen vessels, having been previously mixed with a decoction of the roots of certain herbs pounded up, and mixed with rice flour made into balls. Some cold water is then added to the cooked rice, and it is allowed to stand and ferment for two or three days. The mouth of the vessel is then covered over, and after it has been allowed to stand for another day, the liquor is termed *pachwaí*. It is then distilled into spirits, and is called *sharáb*. *Gur* or molasses is sometimes added to the spirit, but not often, as it makes it more expensive. A quart bottle of ordinary rice spirit sells at from eleven to fourteen *ánnás* (1s. 4½d. to 1s. 9d.).

Other Crops.—Rice forms the great staple crop of the District, but besides this, the following crops are also raised. A small quantity of barley (*jao*) and of wheat (*gaham*) is grown in Jalpáigurí; both crops are sown in November and December, and are reaped in March or April. Mustard is extensively grown as an oil-seed, and, next to rice, is the most important crop in the District. It is sown broadcast on high lands in November and December, and is cut in January and February. The young leaves of the plant are used by the people as vegetables. Indian corn (*bhuttá*) is also grown to some extent. It is generally sown in May and June, and cut in October and November; but the Deputy-Commissioner states that this crop may be cultivated at any season of the year. Among green crops—*más-kalái*, *thikri-kalái*, and *kulthi*, three varieties of pulse, are cultivated. They are sown broadcast on high lands in September, after the *áus* rice crop has been harvested, and are cut in November and December. *Til* seed is also grown, being sown at the same time, and cultivated in a similar manner to the pulses above mentioned. Jute (*koshtá* or *pát*) is somewhat extensively cultivated. It is sown broadcast on low lands in March and April, and cut in July and August. When the young plants are about six inches high, the field is thinned by hand, the plants that are removed being used as vegetables. Cotton is grown principally in the Western Dwárs portion of the District, near the Bhután hills. It is planted in little patches of jungle land, which are cleared for

the purpose during the month of February. The plants are sown in rows about two feet apart, and require to be kept well clear of weeds. The crop is gathered in the following January. Sugar-cane cultivation is carried on principally in the south-western corner of the District; it is planted about March, and cut from December to March following, the cane which is intended to be sold to be eaten raw being cut first, and that intended to be made into sugar being cut last. Tobacco of good quality is also somewhat extensively cultivated in Jalpáiguri District. It is first sown in nurseries, and afterwards transplanted into fields, from the middle of October to the end of November, the plants being placed about two feet apart. This crop requires to be well manured. The leaves are usually gathered in March and April. In the Western Dwárs tract, to the east of the Tístá, *pán* or betel-leaf is grown in the immediate neighbourhood of the husbandman's dwelling. It is planted at the foot of the betel-nut trees, the ground being kept well manured. The creeper clings to the long taper stems of the trees, which form excellent supports for it, while their tufty tops effectually shade it from the rays of the sun, and keep the leaves fresh and green. In the permanently settled portion of the District to the west of the Tístá, however, *pán* is cultivated in covered enclosures, in the same manner as in the other Districts of Lower Bengal. Betel-nut or *supári* palms are cultivated by almost every peasant, generally in the immediate vicinity of his house.

AREA, OUT-TURN OF CROPS, ETC.—The area of Jalpáiguri District is returned by the Superintendent of Revenue Surveys at 2906 square miles (which is identical with that reported in 1875 by the Boundary Commissioner of Bengal), of which 928 square miles are said to be either under cultivation or to be cultivable, and 1978 square miles to be waste and uncultivable. The Deputy-Commissioner of the District, however, makes the area of the District somewhat less. In 1870 he returned it as follows:—Area of the former Western Dwárs District, 1,191,752 acres, or 1862·11 square miles; area of the Rangpur *parganás* transferred to the Western Dwárs in 1869, when the name of the District was changed to Jalpáiguri, 656,381 acres, or 1025·59 square miles. Total area of the District, 1,848,133 acres, or 2887·70 square miles. Out of this area, 219,227 acres, or 342·54 square miles, have been reserved as forest lands, and are under the management of the Forest Department, leaving a balance of 1,628,906 acres, or 2545·16 square miles.

The Deputy-Commissioner states that he has no means of ascertaining the proportion of cultivated, cultivable, and waste land in the permanently settled *parganás* which were transferred from Rangpur District; but he is of opinion that fully three-fourths of the whole are cultivated, and that of the remaining one-fourth, seventy-five per cent. is capable of being brought under the plough. In the Western Dwárs, the cultivated and uncultivated area of each *parganá* was returned as follows by the Deputy-Commissioner in 1870:—(1) Bhalká: cultivated area, 9070 acres; uncultivated, 66,971 acres; total, 76,041 acres. (2) Baxá: cultivated, 6212 acres; uncultivated, 186,230 acres; total, 192,442 acres. (3) Bhátíbárí: cultivated, 9257 acres; uncultivated, 85,868 acres; total, 95,125 acres. (4) Chakoá Kshattriya: cultivated, 3671 acres; uncultivated, 84,930 acres; total, 88,601 acres. (5) Madárí: cultivated, 6404 acres; uncultivated, 117,981 acres; total, 124,385 acres. (6) Lakshmipur: cultivated, 5619 acres; uncultivated, 99,734 acres; total, 105,353 acres. (7) Marághát: cultivated, 18,729 acres; uncultivated, 199,852 acres; total, 218,581 acres. (8) Mainágurí Khás: cultivated, 15,316 acres; uncultivated, 119,761 acres; total, 135,077 acres. (9) Mainágurí Ijárá: cultivated, 60,000 acres; uncultivated, 2752 acres; total, 62,752 acres. This tract is farmed out to the *zamíndár* of the Baikunthpur estate, and the area returned as under cultivation is only an approximate estimate. (10) Chengmárí: cultivated, 10,619 acres; uncultivated, 82,774 acres; total, 93,393 acres. Deducting the reserved forest area, and that of the tract leased to the *zamíndár* of Baikunthpur, there remains a total of 909,772 acres in the Western Dwárs, of which 80,999 acres were under cultivation in 1870; of the remaining 828,773 acres, about three-fourths are said to be capable of cultivation. Of the above-mentioned 80,999 cultivated acres, the Deputy-Commissioner in 1870 estimated that 46,232 acres were under the *áman* or cold-weather rice crop; 3737 acres consisted of homestead land and village sites; and 31,030 acres of *áus* rice, mustard-seed, tobacco, and other crops.

No rice land in Jalpáigurí District pays a higher rental than Rs. 1. 8. 0 per standard *bighá* of 14,400 square feet, equal to about 9s. an English acre. In the permanently settled tract recently transferred from Rangpur, no measurement of lands has been made, and the rates have been fixed by guess. The same remarks apply to the Dwárs. The Deputy-Commissioner estimates a fair yield from *áus* land to be from 8 to 10 *maunds* of unhusked rice per *bighá*, or from 18 to

22 hundredweights per acre. The value of the paddy varies, according to the season, from 8 *ánnás* to R. 1 per *maund*, or from 1s. 4d. to 2s. 8d. a hundredweight; giving a total value for the out-turn of from Rs. 4. 0. 0 to Rs. 10 per *bighá*, or from £1, 4s. 0d. to £3, 0s. 0d. per acre. The mean of these amounts, namely, Rs. 7. 0. 0 per *bighá*, or about £2 an acre, may be taken as fairly representing the value of the crop to the cultivator. A fair out-turn of *áman* or winter rice is stated by the Deputy-Collector to be from 10 to 12 *maunds* of unhusked rice per *bighá*, or from 22 to 26 hundredweights per acre. The value of this paddy, according to the season, varies from 12 *ánnás* to Rs. 1. 4. 0 a *maund*, or from 2s. to 3s. 5d. a hundredweight, giving a total value of the out-turn of from Rs. 7. 8 to Rs. 15 per *bighá*, or from £2, 5s. 0d. to £4, 10s. 0d. per acre. The mean of these amounts, namely, Rs. 11. 4. 0 per *bighá*, or £3, 7s. 6d. an acre, fairly represents the ordinary value of the produce to the cultivator.

CONDITION OF THE CULTIVATORS.—A cultivator's holding exceeding sixty *bighás* or twenty acres in extent would be considered a very large farm, and anything below fifteen *bighás* or five acres a very small-sized farm for a husbandman. From twenty to thirty-three *bighás*, or from seven to eleven acres, would be considered a fair-sized, comfortable holding for a cultivator, and amply sufficient to maintain his household. In some parts of the permanently settled tract to the west of the Tístá, a single pair of oxen can cultivate sixteen or seventeen *bighás* (between five and a half and six acres); but to the east of that river in the Western Dwárs, where the soil is not so light, they are unable to plough more than about thirteen *bighás*, or a little over four acres. The Deputy-Commissioner is of opinion that a small holding of fifteen *bighás*, or five acres in extent, will not make a cultivator so well off as a respectable retail shopkeeper, nor would it enable him to live so well as a man in receipt of a fixed pay of Rs. 8, or 16s. a month. Generally speaking, the peasantry are not in debt; their wants are few, and they raise for themselves almost all the necessaries of life. The Rent-Law of Bengal, Act x. of 1859, is not in force in the Western Dwárs; but in the permanently settled part of the District, the Deputy-Commissioner states that the number of husbandmen who have acquired a right of occupancy in their fields under that law is about equal to those who cultivate their lands merely as tenants-at-will. In the Western Dwárs, hardly any of the cultivators have acquired occupancy

rights, as up to 1870 very few of them had held their land for the prescribed period of twelve years. As regards the higher class of husbandmen or *jotdárs*, the whole of those in the Western Dwárs are liable to enhancement of rent. In the Bodá and Pátgrám divisions, in the Regulation part of the District, almost all the cultivators are similarly liable to enhancement. With regard to the Baikunthpur estates, the Deputy-Commissioner is unable to state whether any of the small holders are exempt from enhancement of rent, as no enhancement cases have hitherto been instituted in the courts by the superior landlord or *zamíndár*. There are no instances in Jalpáigurí District of small proprietors who own, occupy, and cultivate their hereditary lands without either a *zamíndár* or superior landlord above them, or a subholder or labourer of any kind under them. The Deputy-Commissioner estimates that a prosperous husbandman, with a family of six persons, can very comfortably support his household on from Rs. 15 to Rs. 20 (£1, 10s. od. to £2) per month. This, besides being a somewhat high estimate, represents rather the market prices of the food, etc., than the actual expenses incurred. As a matter of fact, nearly every article required for home consumption is raised by each family for itself. Expressed in money, a fair estimate of the cost of living of a shopkeeper or well-to-do husbandman may be set down at about Rs. 10. 8. 0 (£1, 1s. od.), and of an ordinary peasant at from Rs. 7 to Rs. 8 (14s. to 16s.).

Domestic Animals.—The domestic animals of Jalpáigurí District are ponies, buffaloes, cattle, goats, pigs, a very few sheep, and dogs and cats. The animals used in agriculture are bullocks or buffaloes; but in the Western Dwárs, the Mechs sometimes use cows for this purpose. Goats and pigs are reared both for food and as articles of trade; a few families also rear ponies for sale. The value of a cow varies from Rs. 10 (£1) to Rs. 30 (£3), according to the quantity of milk it yields; a pair of plough oxen are worth from Rs. 16 to Rs. 20 (£1, 12s. od. to £2); a score of kids six months old, from Rs. 16 to Rs. 20 (£1, 12s. od. to £2); and a score of full-grown pigs, from Rs. 80 to Rs. 140 (£8 to £14).

Agricultural Implements.—The implements used in agriculture are the following:—(1) *hál* or wooden plough; (2) *phal* or ploughshare; (3) *kodáli* or spade; (4) *kuráli* or axe; (5) *dáo*, a large knife or bill-hook; (6) *khurshá* or *dhelábhángá*, a wooden mallet for breaking clods of earth; (7) *mái*, a bamboo harrow for

levelling the field; (8) *bidá*, a large wooden or bamboo rake for thinning and weeding the fields; it is usually drawn by oxen; (9) *khántí*, a crowbar for digging holes; (10) *kánchí*, a sickle or reaping-hook; (11) *niráni*, *khurpi*, and *dáoká* or *pásar*, hand-weeders. A set of these implements, together with a pair of ploughing oxen, are required to cultivate what is technically known as 'a plough' of land, equivalent to from thirteen to seventeen *bighás* of land in different parts of the District, or from about four to six English acres. The cost of the implements of agriculture is about Rs. 3 or Rs. 4 (6s. or 8s.), and of the cattle from Rs. 16 to Rs. 20 (£1, 12s. 0d. to £2.).

WAGES.—There are very few regular day-labourers or agricultural labourers in Jalpáigurí District, but men can be obtained when required at from 3 to 4 *ánnás* (4½d. to 6d.) a day. The small cultivators themselves, when not actually engaged on their own fields, also hire themselves out as day-labourers. A few Dhángars from Chutiá Nágpur, and some men from the Behar Districts, come to Jalpáigurí in the cold weather for work on the roads. They generally do piece-work, but when employed by the month, are paid at the rate of 3 *ánnás* (4½d.) a day. Some Dhángars have also taken to carrying palanquins, principally on the Dárjíling high road. The Deputy-Commissioner stated in 1870, that if it were not for these men, no palanquin stages could be laid, as none of the people of the District will carry palanquins. These men are paid at the rate of 10 *ánnás* (1s. 3d.) per stage per man. The Northern Bengal State Railway, now approaching completion, will render these palanquin stages on the Dárjíling road unnecessary. There are only two or three blacksmiths throughout the whole District, and the Deputy-Commissioner reports that they earn about Rs. 10 (£1) per month each. Carpenters ordinarily earn from Rs. 8 to Rs. 12 (16s. to £1, 4s. 0d.) a month; but superior workmen who come from Dinájpur receive as much as Rs. 20 (£2) a month. Blacksmiths are not paid by the month or day, but by the job. In former days, before the Bhután war of 1864-65, ordinary labourers could be obtained for two *ánnás* (3d.) a day; and the wages of mechanics and artisans was also proportionally cheaper.

FOOD PRICES.—In 1870, the Deputy-Commissioner returned the ordinary price of the best cleaned rice at from Rs. 2. 4. 0 to Rs. 3 a *maund*, or from 6s. 1d. to 8s. 2d. a hundredweight, according to the time of the year; the grain is, of course, cheapest at harvest time,

and gradually gets dearer afterwards. Common rice sold in 1870 at from R. 1 to R. 1. 8. 0 per *maund*, or from 2s. 8d. to 4s. 1d. a hundredweight. Unhusked rice of the best kind sold at from 12 *ánnás* to R. 1 per *maund*, or from 2s. od. to 2s. 8d. a hundredweight; and of the common kind at from 8 to 12 *ánnás* a *maund*, or from 1s. 4d. to 2s. od. a hundredweight. In 1859-60, the best rice sold at from 12 to 14 *ánnás* a *maund*, or from 2s. od. to 2s. 4d. a hundredweight; and common rice at from 8 to 10 *ánnás* a *maund*, or from 1s. 4d. to 1s. 8d. a hundredweight. Best paddy from 4 to 6 *ánnás* a *maund*, or from 8d. to 11d. a hundredweight; and common paddy from 2 to 4 *ánnás* a *maund*, or from 4d. to 8d. a hundredweight. According to these figures, which are those furnished to me by the Deputy-Commissioner, the price of rice seems to have about trebled in the eleven years between 1859-60 and 1870. The famine of 1866 did not affect Jalpáigurí District, further than to increase the exports, which raised local prices to about double the ordinary rates.

WEIGHTS AND MEASURES.—Weights are seldom used by the people, who generally sell their produce by measure. The shopkeepers, however, use the ordinary Company's *ser* of 80 *tolás*, equivalent to 2 lbs. 0 oz. 14½ drs. avoirdupois; and sometimes also the lighter or *kachchá ser* of 60 *tolás* = 1 lb. 8 oz. 10½ drs. The measures of quantity are as follow:—1 *káthá* = 3¾ *ser*; 3 *káthá* = 1 *don*; 20 *don* = 1 *bis*; 16 *bis* = 1 *puti*, or 88 *maunds*. Measures of time—60 *pal* = 1 *danda* or 24 minutes; 7½ *danda* = 1 *prahar* or 3 hours; 2 *prahar* = 1 *belá* or 6 hours; 4 *belá* = 1 *dibás* or day and night of twenty-four hours. The people have a very vague idea of distance. They make use of the word *kos*; but the general way of expressing distance is to mention the time it takes to go on a journey, by saying that a certain place is one *prahar* distant, *i.e* that it takes three hours to walk there. For short distances, they say that a place is so many *rasís* off, a *rasí* being equal to 80 cubits or 120 feet.

LANDLESS DAY-LABOURERS.—The Deputy-Commissioner states that there is no tendency towards the growth of a distinct class of day-labourers in Jalpáigurí District, neither renting land nor possessing fields of their own. Almost every man in the District tills a little plot of ground for himself. Several of the smaller husbandmen, however, in addition to cultivating their own small patches, also till the fields of others, receiving in return for their labour a one-half

share of the crop. These men are called *ádhiárí* cultivators; the holder of the land pays the *zamíndár's* or landlord's rent, and also supplies the seed-grain, the cultivator having to find the plough cattle, agricultural implements, and labour. This, however, only applies to the Regulation part of the District west of the Tístá. In the Dwárs portion of the District to the east of the Tístá, the same practice of cultivating on a sharing tenure is also followed; but here the holder of the land or *jotdár* has to find seed-grain, cattle, and agricultural implements—everything except the actual manual labour. The cultivator's share of the crop, however, is the same in both cases. The reason of this is, that in the tract to the west of the Tístá almost the whole of the land is taken up and cultivated; while in the Western Dwárs to the east of that river, there is still a great deal of available uncultivated jungle land, and the tenure-holders have to offer additional inducements to the husbandmen.

SPARE LAND.—There is a great deal of available spare land in the Western Dwárs, and also a considerable portion in the north of the Baikunthpur Jungle Mahál, in the Regulation part of the District. The Western Dwárs tract is under direct Government management (*khás*), and settlements are only made for a short term of years; but Baikunthpur, Bodá, and Pátgrám *parganás*, which form the Regulation part of the District transferred from Rangpur in 1869, are all settled in perpetuity. Under the current Settlement of the Western Dwárs, leases for seven years have been granted to considerable landholders (*jotdárs*) from the 1st of April 1870, with the exception of a portion of the Mainágurí Dwár, which was settled with the Baikunthpur *zamíndár* for a period of seven years in 1867. This settlement has now expired, and has been renewed with the same holder for a further term of years. With the exception of this portion of the Mainágurí Dwár and of the Baxá Dwár, which is settled directly with Upendra Náth Dwárdár, the Government rental of all the land in the Western Dwárs is realized by means of Government collectors (*tahsíldárs*), who are paid a commission of ten per cent. on the amount of their collections. The Baikunthpur *zamíndár* for his Mainágurí lands, and the lessee of the Baxá Dwar, are allowed a commission of ten per cent. on their assessment, as cost of collection, and also an additional seven per cent. as profits.

LAND TENURES.—The different classes of tenure holders in Jalpáigurí District are the following:—First, the *zamíndár* or superior

landlord. In the Western Dwárs, the Government itself is the *zamíndár;* in the Regulation or permanently settled part of the District, private individuals are the proprietors, subject to the payment of a fixed Government revenue. The chief *zamíndárs* are the Rájá of Kuch Behar State, and the Rájá or Ráikat of Baikunthpur. Below the *zamíndár* come the larger landholders or *jotdárs*, who in their turn have under-tenants, called *chukánidárs* or *muládárs;* and these sometimes have other under-tenants, such as *dar-chukánidárs*. Below these come the *rayats* or *prajás*, the actual cultivators of the soil. For a detailed signification of the rights, privileges, and duties of each of these tenure-holders, I quote, in a slightly condensed shape, the following Report of Mr. J. Tweedie, Deputy-Commissioner of the Western Dwárs, on the Land Tenures of that part of the country, dated 11th September 1865:—

'This note on the land tenures of the Western Dwárs of Bhután is drawn up with the view of placing on record such information as I have been able to collect during the past few months. It is based on evidence recorded in numerous cases which have come judicially before me; on local examinations conducted by my *ámins* (native revenue officers); and on verbal information given me by residents with whom I have casually conversed. It is written with direct reference to the future settlement of the country; showing the importance of adjusting that settlement in accordance as far as possible with existing institutions, and indicating how their harmonization with our revenue system can best be accomplished.

'After due explanation given, the words current in the District will be used with reference to the various kinds of tenures which will come under review; and, beginning with the highest officers connected in any way with the land and the revenue obtained from it, a gradual descent will be made until the lowest class of cultivating tenants is reached.

'The highest officer thus connected with the revenue of the country was called the Subah or Lieutenant-Governor. Little need be said about him, because he had no personal interest in the soil. He was neither a landlord nor a tenant. His duties connected with the revenue consisted solely in remitting a portion of it to Punákhá, the Bhutiá capital, and the retaining a portion of it as a remuneration for his trouble. His appointment was a temporary one, originating in the supremacy of the party to which he might belong in Bhután; its continuance depended on the retention by

that party of the supremacy. He was a foreigner to the people, a Bhutiá, and lived in isolated and dirty state in his *kilá* or stockade, collecting the revenue, and administering, in his own fashion, civil and criminal law to the people of his proconsulate. It may here be remarked that the Bhutiás were foreigners in the Dwárs, and in this respect they and ourselves are equal. The inhabitants of the Dwárs are Hindus and Muhammadans, with the exception of the migratory Mechs who live along the base of the mountains, sharing the jungle with the tiger and rhinoceros. The Subah was a mere foreign agent, vested with certain definite duties to perform, without the shadow of a title, and also without even a claim to any right or possession in the soil of the Dwárs in which he was resident.

'Immediately below the Subah, the people of the country are for the first time met with. The chief subordinate officer is the *tahsíldár* or *káthám*, who is always a man of respectable birth, and of good repute in the country. His position is that of a sub-collector of revenue. He had charge of a portion of the country within which the Subah ruled—collecting the revenue of that portion and transmitting it to the Subah. His recognised income was derived from collections made from specified localities, which he was allowed to retain for himself. He assisted the Subah in the exercise of his civil and criminal jurisdiction. He was an elective officer, but the election seems to have mainly depended upon the 'bid' made of revenue payable to the Subah. The word *káthám* is synonymous with *tahsíldár*, but is a title implying more dignity, or at least more respect, than that of *tahsíldár*. I speak with confidence regarding the position of these *káthams*, because the chief of them—he of Mainágurí—being recently anxious to learn what was to become of him, applied for information on the subject. The system of temporary settlements was shortly explained to him, and he was asked, 'Suppose you become a Government farmer of revenue, and gain by your percentage a sum equal to that which, under the Bhutiá rule, you enjoyed from the exempted townships, will your position be the same as it was under the Bhutiás?' He answered, 'Yes,' and went away contented. This seems to be conclusive evidence that these *tahsíldárs* and *káthams* have no claim to be considered in any way as the "actual owners of the soil."

'Descending one step lower, the next resting-place is with the *jotdár*. A *jotdár* is a person who holds in severalty, joint, or in

common, a piece of land for which he pays revenue directly to Government through its agents, the *tahsíldárs*. His tenement is called a *jot*, and nothing else but land so held can be a *jot*. Thus if A holds land as above described, and sublets it to B either with or without a rent reserved, A is still the *jotdár*, and B cannot call his holding a *jot*. As the *jot* constitutes the kernel of the existing land revenue system, it will be well to look closely into its incidents. Remarks will, therefore, be made on (1) how a *jot* may be acquired; (2) how it may be dealt with by the *jotdár;* (3) the liabilities of a *jotdár;* and (4) how a *jot* may be destroyed.

'First, as to how a *jot* may be acquired. The most common way, according to the papers which have come before me, is by succession. In most instances it will probably be necessary to go back to the original principle of the first occupant holding the land on which he settles, in order to account for the original acquisition of many *jots*. The Bhutiá Rájás and governors were wont to allow settlers to occupy unpopulated tracts of country for a term of five years, more or less, without payment of revenue. At the end of such term the settler became the *jotdár* of the land which he had brought under cultivation, paying thereon such Government revenue as might be fixed. It is beyond a doubt that very many *jots* exist which have passed hereditarily through several generations, and whose origin the present holders cannot trace. Another way in which a *jot* may be acquired is by purchase, and another is by gift from a *jotdár*. This right of alienation by sale or gift is, however, limited, as described in the next paragraph. The last way of acquiring a holding with *jotdárí* right is by grant from the Bhutiá Rájá, represented locally by his Subah. This may take place, first, in case of *jots* which have lapsed, as when a *jotdár* dies without leaving an heir, or when a *jotdár* abandons his holding; and second, in case of a first entry in uncultivated land, as described above.

'Second, as to how a *jot* may be dealt with by the *jotdár*. The *jotdár* may occupy his *jot* himself as peasant proprietor, cultivating such crops as he pleases, and disposing of the produce as to him seems best. He may also sublet the whole or any portion of his holding to whom he pleases, on whatever terms he can obtain. A *jotdár*, whether holding in severalty, joint, or in common, may at any time sell his rights, provided that in doing so he does not prejudice the rights of any third person. Thus, if a *jotdár* has a

son who will be heir to his father, the father cannot dispose of the *jotdárí* rights without the consent of the son; they are the property of the family, not of the individual. No instance of a testamentary devise has come before me, and probably the same principle as that which regulates alienation by sale or by gift would apply to rights devised by will. In all cases of alienation, and probably also in cases of succession, a fee for recognition of the change was payable to the Rájá's representative or Subah. This fee was in its nature either a fine or a relief; probably, where there was both an outgoer and an incomer, both a fine and a relief were taken. This customary payment will, under our rule, be replaced by a registration fee. This much respecting alienation of *jots* in perpetuity; but a *jotdár* may also alienate his holding for a time only, which is effected by a kind of mortgage. 'Mortgage' is used for want of a better word, for what is meant is not the *mortuum vadium*, but the *vivum vadium*,—that is to say, A, a *jotdár*, borrows money from B, and gives to B the possession of the *jot* for such (previously ascertained) term as shall allow B to recoup himself out of the produce of the estate. Much litigation is caused by this power of the *jotdár*, the dispute generally turning upon the point whether the transaction was a sale outright, or such an agreement as that above described. Nothing but the introduction of the Registration Act will put an end to these disputes.

'Third, as to the liabilities of a *jotdár*. These are mainly two, (1) to pay his fixed revenue; and (2) to pay the benevolences which the Bhután Rájás were accustomed to demand from time to time.

'Lastly, as to how a *jotdárí* tenure may be destroyed or terminated. The ways are few; namely, (1) by failure of heirs; (2) by desertion; and (3) by abandonment of allegiance, which is necessarily accompanied by desertion. *Jotdárí* rights cannot be sold on account of a default made by the *jotdár* in payment of his revenue. The evidence on this very important point, both oral and written, is all in support of this statement. Should additional inquiry further establish the fact, then probably this exemption from sale will be reckoned one of the institutions of the country, which it will be difficult to harmonize with our revenue system.

'Having thus considered the *jotdár* in all his relations, the minor estates and tenure holders come next under review. These are all dependent upon the *jotdárí* estates, the *jotdár* being the superior

landlord, and the holders of the inferior estates the tenants. Tenants are of three kinds or classes, known as *chukánidárs* or *mulánidárs*, *rayats*, and *prajás*. These classes are distinguished from each other, first, by the length of time for which the estates are held, and secondly, by the mode in which the rent is paid by the lessees.

'First are the *chukánidárs* or *mulánidárs*. These two words are synonymous. The derivation of the former I do not know; probably the latter is derived from *múlyá*, signifying price or value. The tenants called by these names are men who hold their farm for a fixed term of upwards of one year, paying to the *jotdár* a fixed money rental. The rights of such tenants are of a temporary nature, and exist merely by force of the contract which may have been made between the tenant and landlord. The tenant cannot sell or even transfer his rights, except with the permission of the *jotdár*. The *chukánidár* or *mulánidár* of Bhután thus corresponds with the ordinary farmer for years in England, and the incidents belonging to the status of the former are in nearly all points the same as those which characterize the latter.

'Next in downward gradation comes the *rayat*. This word is not used here, as in other parts of Bengal, as a general term applicable to various kinds of cultivators. Here the word merely means a yearly tenant, who pays to the *jotdár* a yearly money rent for the land held by him. He thus differs from the *chukánidár*, who holds his lands for a term of years. He also differs from the last and lowest description of rent-paying tenants, the *prajás*, in the following respects:—First, the *rayat* is a tenant for a year, while the *prajá* is in theory (whatever he may be in practice or by interpretation of law) a mere tenant-at-will. Second, the *rayat* pays a money rent, while the *prajá* pays in kind at the rate of half the produce of his fields to the *jotdár*, his landlord. Third, the *rayat* is a man of some capital, and as such, conducts his agricultural operations at his own expense; whereas in the case of the *prajá*, the seed, and often the plough-cattle and implements of agriculture, are supplied by the landlord. The amount of seed advanced must be repaid at harvest time, over and above the half produce of the fields.

'The foregoing paragraphs contain an enumeration of all the kinds of revenue and rent-paying tenures with which I am acquainted. Passing over the *subahs* and the *tahsíldárs* as mere collectors and deputy-collectors of revenue, it has been shown that the *jotdár*,

although he cannot claim to be the actual possessor of the soil, yet holds his land by a tenure which is of the highest description known in the country; and that his estate amounts very nearly to a freehold in fee simple, his only burden being the Government revenue, and his power of disposition of his property being controlled only by the law of succession. The *chukánidár* or *mulánidár* is the farmer-tenant for years; the *rayat* is the same for a single year; while in the *prajá* is to be found the lowest species of rent-paying tenant, and in the terms to which he has to submit are embodied the current ideas of a rack rent, as existing in the Western Dwárs at the date of annexation.'

The foregoing Report was written in 1865. Since then a careful settlement of the Western Dwárs has been made for a period of seven years dating from April 1st, 1870, in which the status and rights of the *jotdárs*, and of all others having an interest in the soil, are laid down and clearly defined. In many respects, therefore, the descriptions in Mr. Tweedie's Report, above quoted, are inapplicable to the state of things as existing at the present day.

The tract of country west of the Tístá, which was transferred from Rangpur in 1869, is permanently settled under the provisions of the Regulations of 1793, and in this respect is on precisely the same footing as the other Regulation Districts of Bengal.

RATES OF RENT.—The following paragraphs, showing the prevailing rates of rent paid by each class of landholders and cultivators in the Western Dwárs Subdivision, and also in the Regulation part of Jalpáiguri District, are quoted from a special Report from the Deputy-Commissioner to the Government of Bengal, dated the 2d August 1872. The report also throws further light upon the condition and status of the landholding and cultivating classes than that contained in Mr. Tweedie's Report above cited. The Deputy-Commissioner's Report treats separately of the two tracts comprising the District, and states as follows:—

'(1) THE WESTERN DWARS.—The cultivated land in the Dwárs consists of patches of arable land, scattered here and there over a country chiefly covered with cane, grass, and tree jungle. This tract contains none of the usual divisions of land, such as *parganás* and *mauzás*; in their places are to be found *gírds*, *táluks*, and *jots*. The *gírd* corresponds to a *parganá*. The *táluk* is a subdivision of a *gírd*, which first came into existence in the time of the first settlers in a jungle tract, who gave to that part where they settled, either the name of the chief man amongst them, or the name of some natural object

prominent in the neighbourhood. Thus, Kázíbáish *táluk* took its name from the Kází who was the first settler; while Ambárí and Katálbárí *táluks* were so called from the number of mango or jack trees abounding in those parts. In these *táluks* there are no *mauzás*, and many villages in them have no distinct names. Thus, in the Revenue Survey Records will be found forty, fifty, or a hundred nameless village sites entered against one *táluk*. The only subdivision of *táluks* bearing names are *jots*. These *jots* are of all sizes, and several village sites or clusters of homesteads may be found in a single *jot*. A witness in the courts, being asked in what village or where he lives, answers by giving the name of the *jot* in which he lives. These *jots* either bear the name of the original settler who first held them, or of the man in whose name they may have been afterwards registered; more generally, however, the former.

'In the *jotdárs* we meet the first, and under the late Settlement the only recognised landholders; and with them alone the Settlement has been made. Some *jotdárs* cultivate all, and others a portion of their lands with their own hands; and such are actual cultivators. Most of them, however, have under-tenants, such as *chukánidárs* or *mulánidárs*. The *chukánidár* or *mulánidár* possesses a transferable right in his lands. In addition to these under-tenants, the *jotdárs* cultivate some of their lands through their *prajás*, a class of cultivators described below. In some cases the *chukánidár* cultivates his lands with his own hands, and is thus an actual cultivator. More often, however, he cultivates through his *prajás*, or lets out some of his land to a *dar-chukánidár*. The *dar-chukánidár*, I am informed, was not very common under the Bhutiá rule; but since our annexation of the Dwárs, this class has rapidly increased in number, and they are beginning to be recognised by their landlords as having a transferable right in their lands. Like the *jotdár* and *chukánidár*, the *dar-chukánidár* cultivates, in some instances, with his own hands, and is thus an actual cultivator; but more commonly he also cultivates through his *prajás*.

'We come then to the *prajá*, the most general of the actual cultivators of the soil. The *prajá* does not pay a money rent; he is called *adhiárí prajá*, as his rent consists of half the yield of his crops. There are two classes of *prajás*, of which one is found in *gírd* Battris-hazárí, now more commonly known as Baikunthpur, and in some other *gírds*. He supplies his own cattle and plough, but receives from the *jotdár*, *chukánidár*, or *dar-chukánidár* who

employs him, the seed necessary for the cultivation of his fields; at harvest time he makes over to his landlord half the crop. In Mainágurí, and in some other *gírds*, the *prajá* is provided by his landlord with seed-grain, cattle, and plough; and in addition, when first engaged, a certain amount of rice for food, which is not to be returned until he leaves the *jot*, and then without interest. Should he at any time require more food, it is advanced by the landlord, to be repaid out of the year's crop, with interest at from fifty to a hundred per cent. Like the other, this *prajá* at harvest time makes over to his landlord half the out-turn of the fields cultivated by him. Under the Bhutiá rule, I learn that the *prajás* seldom remained over one or two years on any one *jotdár's* lands. They used to wander from the jurisdiction of one Bhutiá Subah or governor to that of another. Their motive was, that once out of one jurisdiction and settled in another, their old master could not come upon them for arrears of advances, the transit from one Subah's rule to another being for them equivalent to passing through a bankruptcy court. Since we have held the Dwárs, the *prajás* have greatly dropped their migratory habits, and stay for years on the same land. In fact, I have met with some instances in which, after having been for some years on the same land, the *prajás* have commenced to pay a money rent, and have ceased to be *ádhiárs*. *Prajás* are chiefly Rájbansís or Kochs.

'It will be seen from what I have written above, that the actual cultivators are mainly the *prajás*, who till the land for *jotdárs*, *chukánidárs*, or *dar-chukánidárs*, but that the three latter also cultivate some portion of their holdings with their own hands. It is quite impossible to obtain, with any degree of accuracy, the average prevailing rates which the *prajás* may be said to pay for their lands, as no two *prajás'* circumstances are alike. They cultivate land without measurement; and the produce, of which they pay one-half as rent, is of course dependent on the land being of better or inferior quality, on the rainfall of the year, and on other causes. It remains to be seen, therefore, if any average rate can be arrived at from the rates paid by the *jotdárs*, *chukánidárs* or *mulánudárs*, and *dar-chukánidárs* who are themselves actual cultivators.

'The *jotdár's* rates have been fixed in the late Settlement; and he now pays, according as his *jot* is in one or other part of the Dwárs, one of the two following rates:—First-class land (1), 5 *ánnás* 4 *pie* per *bighá*, or 2s. per acre; (2) 8 *ánnás* per *bighá*, or 3s. per acre.

Second-class land, (1) 2 *ánnás* 8 *pie* per *bighá*, or 1s. an acre; (2) 4 *ánnás* per *bighá*, or 1s. 6d. an acre. Waste land, 6 *pie* per *bighá*, or 2¼d. an acre. It is obvious that these rates, which the *jotdár* pays all round on his land, whether he cultivates it himself, whether he sub-lets it to a *chukánidár*, or whether he cultivates it through *prajás*, cannot be taken as indicating the prevailing rate paid by the actual cultivator.

'We come then to the *chukánidár*; but here again it is impossible to fix the rate wanted. He holds a *jot* containing lands of every description. Such lands are not specified or measured, being estimated without any attempts at measurement by the *hál* or plough, *i.e.* the quantity of land supposed to be cultivable with the aid of a single pair of bullocks; and for this *jot* he pays a lump sum, fixed apparently without any reference to the number of *háls* he holds. A *chukánidár* in one place will pay Rs. 4 or Rs. 5 (8s. or 10s.) for his *hál*; in another, Rs. 20 (£2). The only rule that I can find to guide this variation, is that the more open and cultivated the neighbourhood, the higher is the rate of rent paid for the *hál*; and the more jungly, the lower the rate. The *hál* is a purely arbitrary measurement, and in the first instance must have depended mainly on the strength of the pair of bullocks brought to cultivate. When for special *zamíndárí* purposes the *hál* has been reduced into a rough calculation of measurement, it is found that such reduction differs in every place where it has been effected. Thus, in one place, a *hál* will be said to contain fifteen *dons*, in another twenty *dons*. The *don* is also a most uncertain measurement; a certain number of *mushto* or hand-breadths, varying in places from ten to twelve, make one *gaz*, and forty *gaz* long by forty wide makes one *don*.

'As a specimen of the great variation of rates, I give the following abstract of two, out of several reports submitted to me by Government *tahsíldárs*. The *tahsíldár* of Ambárí Phálákátá, starting with the statement that land rents at a *jamá* (fixed assessment) without any reference to rates and without measurement, proceeds to say that the *hál* is the nominal estimate of measurement, and the rate per *hál*, Rs. 9 to Rs. 20 (18s. to £2). He states that in Ambárí Phálákátá; out of one *hál*, $\frac{8}{16}$ is usually deep land rice, $\frac{1}{16}$ land on which jute may be grown, $\frac{7}{32}$ land on which high land rice may be sown, and $\frac{7}{32}$ waste. Taking this as the average proportion, he fixes the following as the average rates paid by the cultivators:—Jute land,

from Rs. 1. 4. 0 to Rs. 1. 8. 0 per *bighá*, or from 7s. 6d. to 9s. an acre; high rice land, from 8 to 12 *ánnás* per *bighá*, or from 3s. to 4s. 6d. an acre; deep rice land, from 12 *ánnás* to Rs. 1. 4. 0 per *bighá*, or from 4s. 6d. to 7s. 6d. an acre; waste land, from 2 to 8 *ánnás* per *bighá*, or from 9d. to 3s. an acre. For Chengmárí, a *tahsíldár*, making his calculation in much the same way, and stating that the rate per *hál* is from Rs. 5 to Rs. 12 (10s. to £1, 4s. 0d.), gives the following as average rates:—Jute land, from 8 *ánnás* to Rs. 1. 4. 0 per *bighá*, or from 3s. to 7s. 6d. an acre; high rice land, from 4 to 12 *ánnás* per *bighá*, or from 1s. 6d. to 4s. 6d. an acre; deep rice land, from 8 *ánnás* to R. 1 per *bighá*, or from 3s. to 6s. an acre.

'These calculations are quite useless for the purpose of fixing the average rates paid by the cultivators. Having made careful inquiry, I am of opinion that the *chukánidár* pays no rate of rent really estimated according to the land he holds, or ascertained by actual measurement. He appears to pay a lump sum sufficient to cover the rent payable by his landlord for the same land, and to leave the said landlord a fair margin for profit, such margin being from 4 to 8 *ánnás* or upwards in the rupee (from twenty-five to fifty per cent., or even over). Thus, if a *jotdár* sub-lets a *jot* for which he pays Rs. 5 (10s.) to Government, he will retain a small portion in his own hands for direct cultivation, and sub-let the remainder for some Rs. 7. 8. 0 (15s). The same process holds with the *dar-chukánidár*, who in his turn pays to the *chukánidár* or *mulánidár* an enhancement on the rent paid by the latter to the *jotdár* of from 4 to 8 *ánnás* in the rupee, or an advance of from twenty-five to fifty per cent.

'I think it will be admitted that these peculiarities of tenure, want of measurement, and inequality of prevailing rents,—taken along with the fact that the actual cultivator is mainly the *ádhiárí prajá*, who pays his rent in kind, but that besides him, the *jotdár*, *chukánidár*, and *dar-chukánidár*, all holding at different rates, are at times actual cultivators,—entirely prevent anything like a fair average rate being fixed as that paid by the actual cultivator.

'In addition to those above mentioned, there is another actual cultivator in the Dwárs, namely the Mech. These Mechs are nomadic husbandmen, who wander from spot to spot in the jungles, breaking up the virgin soil with their *dáos* or bill-hooks, cultivating cotton and rice, and seldom remaining more than two years in the same place. They pay a capitation tax of Rs. 2 (4s.) per annum

per man, in return for which they may cultivate as much land as they are able.

'(2) THE JALPAIGURI SUBDIVISION, or that portion of the District which formerly belonged to Rangpur. This tract of country is more open and cultivated than the Dwárs, but it appears to have been held originally much as the Dwárs are now held, by *jotdárs*, *chukánidárs*, *dar-chukánidárs*, and *prajás*. Here, too, we find no kind of measurement in use; the nominal estimate is the *hál*, but this varies everywhere, and here, as in the Dwárs, rent is paid in a lump sum, fixed without any direct reference to the quantity of land held.

'In Pátgrám, the officer in charge reports that lands are not leased out according to any regular system or classification, but by an approximate estimate of the probable out-turn, the actual cultivators paying a rent at from Rs. 10 to Rs. 30 (£1 to £3) per *bís*, a *bís* being equal to from 12 to 20 *bighás* (from 4 to 6⅔ acres); thus giving an average of from 8 *ánnás* to Rs. 1. 8. 0 per *bighá*, or from 3s. to 9s. an acre, for lands all round, irrespective of class. He also reports that the *ádhiárí prajá* system prevails in Pátgrám. The manager of Chakláját reports of Bodá that settlement with the actual cultivator is made without regard being had to measurement or classification of lands. The settlement is made for a certain block, including all descriptions of land except homestead, at rates varying from Rs. 10 to Rs. 30 (£1 to £3) per *bís*, which is equal to 13½ Bengal *bighás*. Another *tahsíldár*, reporting on Bodá, says that the number of *dons* in a field are guessed, not measured. Another report, also on Bodá, estimates the average rates as follows:—Deep rice land, from 12 *ánnás* to Rs. 2 per *bighá*, or from 4s. 6d. to 12s. an acre; high rice land, from 8 *ánnás* to R. 1 per *bighá*, or from 3s. to 6s. per acre. It will thus be seen that it is as difficult for this part of the District as for the Dwárs to arrive at any clear idea of an average rate.

'I would, however, record the following rates as those which I have, after much inquiry, come to the conclusion may be taken as the nearest approximation to average prevailing rates, which can be given in this District. In the Dwárs—deep rice land, from 8 *ánnás* to R. 1 per *bighá*, or from 3s. to 6s. per acre; high rice land, from 2 *ánnás* 8 *pie* to 10 *ánnás* 8 *pie* per *bighá*, or from 1s. to 4s. per acre; land suited for jute cultivation, 13 *ánnás* 4 *pie* to Rs. 1. 4. 0 per *bighá*, or from 5s. to 7s. 6d. per acre. In the Jalpáiguri Subdivision—deep rice land, from 10 *ánnás* 8 *pie* to Rs. 1. 4. 0 per *bighá*,

or from 4s. to 7s. 6d. per acre; high rice land, from 5 *ánnás* 4 *pie* to 13 *ánnás* 4 *pie* per *bighá*, or from 2s. to 5s. an acre; land suited for jute cultivation, from R. 1 to Rs. 1. 8. 0 per *bighá*, or from 6s. to 9s. an acre.'

MANURE, IRRIGATION, ETC.—Almost every cultivator in the District keeps some cattle of his own, and uses the cow-dung and stable litter for manuring his tobacco, *pán*, betel-nut, sugar-cane, and in fact all his crops as far as the supply lasts. Manure is never bought, and the quantity used is regulated solely by the extent to which it is obtainable. Those who keep many cattle use manure to a much larger extent than those who only keep a few. From 70 to 80 *maunds* per *bighá*, or from $7\frac{1}{2}$ to $8\frac{3}{4}$ tons per acre, is considered a liberal allowance of manure for sugar-cane land, the crop which requires it most. Irrigation is very commonly practised in the eastern portion of the Western Dwárs Subdivision, principally for the *áman* or winter rice crop. The water is conveyed to the fields by small artificial channels and watercourses, cut from the neighbouring rivers and streams, which intersect the country in every direction, and which are dammed up for the purpose. These small channels or trenches, called *dúngs*, are generally cut by the cultivators themselves, and not by means of hired labour. In the other parts of the Western Dwárs, irrigation is not resorted to. In the permanently settled portion of the District, regular wells are sometimes made: a hole is first dug, and is then enclosed by means of baked earthen rings about two feet in diameter, sunk into the ground, and placed one above another. These wells cost about Rs. 5 or Rs. 6 (10s. or 12s.); but such regularly constructed wells are rarely made. For the most part, if river water is not easily procurable, a large hole, a few feet in depth, is dug in some low-lying spot, and this costs no more than about a rupee (2s.). In the permanently settled tract to the west of the Tistá, where the land is almost all under cultivation, it is not usual to allow the fields to remain fallow for the soil to recruit itself. But in the Dwárs, where spare land is plentiful, the husbandmen seldom cultivate their *áus* rice, mustard, tobacco, etc., more than two years in the same spot; they then clear and cultivate a fresh piece of fallow or jungle land, returning to the old spot again after the lapse of a few years, when the productive powers of the soil have become renovated. The *áman* or winter rice crop is continuously cultivated everywhere on the same land year after year, which is not usually allowed to

remain fallow. Rotation of crops is not practised in Jalpáiguri District.

NATURAL CALAMITIES.—The Deputy-Commissioner states that such a thing as a total destruction of the crops, by either blight, flood, or drought, is altogether unknown in Jalpáiguri. The crops are sometimes partially injured in certain localities by the overflowing of the rivers, or by unusually heavy rainfall; but so far as can be learnt, no calamity of this description on such a scale as to affect the general prosperity of the District has ever taken place. There appears to be no demand for canals or irrigation works as a preventive against drought, the country being everywhere naturally intersected by numerous rivers and streams.

FAMINES AND FAMINE WARNINGS.—The Bengal famine of 1866-67 hardly affected Jalpáiguri at all. The demand for grain, however, in less favoured parts of the country caused a considerable increase in the exports of rice over that of other years, which had the effect of raising local prices to about double the ordinary rates. The Deputy-Commissioner reports that prices may be considered to have reached famine rates when rice is selling at from ten to eight *sers* for the rupee, or from Rs. 4 to Rs. 5 per *maund* (equal to from 10s. 10d. to 13s. 8d. per hundredweight); and states his opinion that relief operations on the part of Government would then become necessary. Jalpáiguri District mainly depends for its food supply upon the *áman* or cold-weather rice crop, which is cultivated to from two to three times the extent of the *áus* or autumn rice. In the event even of a total failure of the *áus* harvest, the loss would not be very much felt; but if anything like a total destruction of the *áman* crop should take place, the loss could not be compensated for by the *áus* harvest, and the Deputy-Commissioner reports that in such a case he would apprehend a famine. The people in the Western Dwárs portion of the District find abundance of common vegetables and wild fruits which they cook as food, and also numerous varieties of berries which they eat, so that in the event of a general scarcity they would be much better off than the people in the permanently settled tracts to the west of the Tístá, where the land is more cultivated, thickly populated, and where there is very little jungle. The Deputy-Commissioner, in 1870, reported that the several fair-weather roads and numerous navigable rivers and streams in the District afford sufficient facilities for the importation of grain, to prevent the danger of the isolation of any particular tract in the event of a famine. An additional safe-

guard in this respect is formed by the Northern Bengal State Railway, now approaching completion, which passes through the Regulation part of the District. The Deputy-Commissioner, however, stated that such a thing as a considerable scarcity of food was not at all likely to occur in Jalpáigurí District. Being bounded on the north throughout its entire length by the lofty Bhután range, he thought it very improbable that either the local rainfall, or the supply of water brought down by the rivers and streams, would be affected by even the severest drought which might occur elsewhere.

FOREIGN AND ABSENTEE LANDHOLDERS.—There are no European landholders registered as proprietors on the rent-roll of Jalpáigurí. Throughout the whole District, the Deputy-Commissioner states that there is about one Musalmán *jotdár* to every three Hindus of the same class. In the permanently settled part of the District to the west of the Tístá, the numbers of Musalmán and Hindu *jotdárs* are reported to be nearly equal. The Deputy-Commissioner states that he has no means of ascertaining correctly the amount of land revenue paid by Muhammadan landholders, as compared with that realized from the Hindus. The Fiscal Divisions of Bodá and Pátgrám are owned in *zamíndárí* by the Rájá of Kuch Behar, who may be styled an absentee, as his residence is at Kuch Behar town, in the semi-independent State of that name. Kuch Behar, however, is only fifty-five miles distant from the Civil Station of Jalpáigurí. The present Kuch Behar Rájá is a minor; and his *zamíndárí* estates in Jalpáigurí, as well as his own independent territory, are temporarily placed under direct Government management.

ROADS.—Jalpáigurí District is fairly well supplied with roads, some of which are maintained by the Public Works Department, and others are under local management. In 1870, the Deputy-Commissioner returned the different lines of road as follows:—Under management of the Public Works Department—(1) About twenty-seven miles of the imperial cart road from Purniah to Dárjíling passes through Jalpáigurí. It enters the District at Titályá, and runs along the east or left bank of the Mahánandá river to Silígurí, where it crosses the river and passes into the Dárjíling *tarái*. (2) Road from Jalpáigurí town due west to Titályá on the Purniah and Dárjíling road, twenty-nine miles in length, along which the Calcutta mails are carried. Carts pass along this road throughout the year; but the Deputy-Commissioner in 1870 stated that the bridges were in a bad state of repair. It was suggested that this

road should be transferred from the Public Works Department to local management. (3) A very fine road extends from Kuch Behar town to the military station of Baxá, in the Bhután range in the east of the Dwárs Subdivision. The part of the road between Alípur and Baxá lies within Jalpáigurí District, and is twenty-one miles in length. I have been unable to ascertain the cost of maintenance and repairs of these imperial lines of road.

Roads under local management.—(4) The principal road in the District under local management is that running from the Station of Jalpáigurí in an easterly direction, through the Western Dwárs Subdivision as far as the ferry on the Sankos river, on the eastern boundary of the District, near the cold-weather police outpost station of Haldíbárí. From this point the road passes into the Eastern Dwárs, which now form a Subdivision of the Assam District of Goálpárá. The total length of the road in Jalpáigurí District is seventy-seven miles, the different stages being as follows:—From Jalpáigurí to Mainágurí, length, seven miles; from Mainágurí to Dhupgurí, thirteen miles; from Dhupgurí to Phálákátá, twelve miles; from Phálákátá to Alípur, twenty-two miles; from Alípur to the Sankos ferry at Haldíbárí police outpost, twenty-three miles; total, seventy-seven miles. The large market villages along this road are Jalpáigurí, Mainágurí, Dhupgurí, Phálákátá, and Alípur, besides several smaller ones situated at different places along, or in the immediate neighbourhood of, the road. Police stations are situated on this road at Jalpáigurí (the Headquarters Station of the District), Mainágurí, Phálákátá (the Headquarters of the Phálákátá or Western Dwárs Subdivision), and at Alípur; also a police outpost station at Dhupgurí. The Deputy-Commissioner in 1870 reported that that portion of the road between Jalpáigurí town and Phálákátá was in very good order, and available for wheeled traffic at all seasons of the year. From Phálátáká, however, eastwards to Haldíbárí, it is not in such a good condition, and carts are only able to pass along it in the cold and dry seasons. (5) From the town or rather village of Mainágurí (the former Headquarters of the Western Dwárs District, which was abandoned in 1869 on the transfer of the *parganás* from Rangpur, when the Headquarters were transferred to the present locality at Jalpáigurí town) runs a road twenty-six miles in length, in a north-easterly direction, to Ambárí, a cold-weather police outpost station near the Bhután frontier, passing through the village of Rámsahái Hát about eleven miles from

Mainágurí. From Ambárí outpost, a track or path leads to a Bhutiá stockade at Chámurchí. (6) A road runs from Mainágurí to Kuch Behar town, of which only eleven miles pass through Jalpáigurí District. (7) A short road leads from the east or left bank of the Tístá, opposite Jalpáigurí town, to Dungá Hát, four miles in length, and from thence to Domáhání Hat, two miles. (8 and 9) There are roads also from Mainágurí to Domáhání Hát and Dungá Hát, the former five and the latter four miles in length. These short lines of road are all passable by carts in the cold and hot seasons without much difficulty, but in the rainy months they are impracticable for wheeled traffic. (10) From Jalpáigurí a road runs north-west for twenty-seven miles to Sílígurí, *via* Ambárí Phálákátá. Sílígurí is situated on the western boundary of the District on the Purniah and Dárjíling high road. The road from Jalpáigurí to Sílígurí carries the District mails for Dárjíling. (11) Another road leads from Jalpáigurí to Bodá, where there is a subordinate judge's court; it is thirty miles in length, and in 1870 was reported to be in a bad state of repair. The cost of maintenance and repairs of the above eight roads is returned by the Deputy-Collector at about £1175 per annum. (12) A road leads from Jalpáigurí to Dálingkot, a former Subdivision of the Western Dwárs District, now transferred to Dárjíling. Twenty-nine miles of this road pass through Jalpáigurí District. It was formerly under the Public Works Department, but was transferred to local management a few years ago. The Deputy-Commissioner in 1870 reported that this road was in a very bad state of repair, and that its cost of maintenance amounted to about £200 per annum. (13) Road from Jalpáigurí town to Kuch Behar; the portion of the road running through this District is twenty-six miles in length. This road was also transferred a few years ago from the Public Works Department to local management. Carts are able to travel by it all the year round; the cost of maintenance is returned at about £122 per annum. Besides the foregoing, there are many other village roads and tracks in Jalpáigurí District, but none of any great importance.

A list of the ferries maintained where the roads cross the larger rivers will be found on pp. 232, 236 of this Statistical Account.

THE NORTHERN BENGAL STATE RAILWAY, now (1876) in course of construction, will traverse the western portion of Jalpáigurí, with stations at Boalmárí, Jalpáigurí, Sáhib-ganj Hát, and Baidrám, where it passes into Dárjíling District.

MANUFACTURES.—There is no manufacturing community in Jalpáigurí District; the people are nearly all agriculturists, and in addition to tilling their fields, they make their own mats, agricultural implements, and many of them also their own clothes. The people of the Jugí and Tántí castes, however, weave the common country cloth that is worn by the majority of the people. Boats are made out of the hollowed trunks of trees cut in the forests, principally by the Mechs, who combine this trade with their nomadic agriculture. With these exceptions, hardly any manufactures are carried on in Jalpáigurí District.

COMMERCE AND TRADE.—Rice, paddy, jute, mustard-seed, betel-nuts, cotton, lac, *sál* timber, tobacco, *til* seed, Bhutiá ponies, Bhutiá blankets, *yak's* tails, *ghí* (clarified butter), wax, musk, etc., form the principal articles of export; the chief articles of import obtained in exchange are brass utensils, salt, oil, cloth, spices, cocoa-nuts, beads, sugar, molasses, etc. The principal permanent seats of commerce and market villages are Jalpáigurí, Titályá, Rájnagar, Sáldánga, Deviganj, Baurá, Jorpakrí, Mainágurí, Phálákátá, and Alípur. There are also numbers of small villages scattered over the Regulation part of the District, and a few in the Western Dwárs, at which markets are held on one or more days of the week. Besides these permanent places of trade, annual trading fairs are held at the following places, on occasions of religious feasts or anniversaries:—(1) Titályá fair takes place at the time of the *Dol-jatra* festival, in February or March, and lasts for fifteen days. This fair was established by Dr. Campbell, the first Superintendent of Dárjíling, for the purpose of promoting interchange of trade between the inhabitants of the hill tracts and of the plains. (2) The Jalpesh fair is held at the time of the *Siva-ratrí* festival, in January or February, and lasts for ten days. (3) A fair is also held in January or February, on the occasion of a Muhammadan religious ceremony, at which prayers are said for the dead; the fair lasts about ten days. (4) A trading fair was established at Phálákátá in January 1871, by the Commissioner of the Kuch Behar Division, for the purpose of interchange of commodities between the Bhutiás to the north and the people of the plains. The first Phálákátá fair was held from the 5th to the 25th January 1871. The crops of the District more than suffice to meet the local wants; and jute, *sál* timber, and tobacco are largely exported, as also are rice and paddy to a less degree. The Deputy-Commissioner states, however, that the

imports much exceed the exports in value, and that there is no general accumulation of coin going on in the District.

A letter, published in *The Statistical Reporter* of March 1876, gives some information concerning the tobacco trade of this part of the country. On going down the Tístá, signs of activity in this traffic become apparent soon after leaving Jalpáigurí. At Baurá (the most busy mart in the District) the leaf is of superior quality and texture, but it is packed in native-made gunny-bags, in bundles open at both ends. At Ghorámárá, farther down the river in Rangpur District, there is a Scotch gentleman engaged in the trade, of which he gave the following account :—'The *rayats*, who are mostly Muhammadans, cultivate the tobacco in small plots; they sell the produce to the *páikárs* or middlemen, who again re-sell, on a more wholesale scale, to the *mahájans*. The tobacco cultivated is of very widely different varieties, which take their names from the *háts* where they are most dealt in. The great trade is in *bispát*, or the lower leaves of the plant. Some years ago this was considered almost valueless; but prices have of late risen rapidly, and it is said that in 1875 as much as Rs. 4 per *maund* (10s. 10d. a hundredweight) was paid. Better kinds of leaf are known as *pakká-pát* and *hickat*. The tobacco is brought in by the *páikárs*, either in bulk or in bundles; but as it is commonly drenched with water before giving delivery, it requires to be re-sweated and assorted. It is then packed up again into bundles, under gunny covers, containing about 130 lbs. each, and forwarded by boat to Goálandá, and thence to Calcutta by rail. The loss in weight on the voyage, of say 18 days, amounts to from 6 to 10 per cent.

River Trade Statistics.—Since September 1875, a complete system of trade registration has been established on all the great river systems of Bengal, and the results are published monthly in *The Statistical Reporter*. It is possible that a considerable portion of the trade of such a remote District as Jalpáigurí may escape registration altogether, but the export of jute and tobacco, and the import of English piece-goods, are, no doubt, approximately recorded. The two following tables show (Table I.) the exports from Jalpáigurí District during the six months ending February 1876; and (Table II.) the imports during the same period :—

STATISTICS OF THE RIVER TRAFFIC OF JALPAIGURI DISTRICT FOR THE SIX MONTHS ENDING FEBRUARY 1876.—TABLE I. (EXPORTS.)

Description of Goods.	September.	October.	November.	December.	January.	February.	Total.
CLASS I.	*mds.*	*mds.*	*mds.*	*mds.*	*mds.*	*mds.*	*mds.*
Coal and coke,	2200	...	...	...	...	...	2,200
Fresh fruits and vegetables,	...	...	...	...	...	40	40
Pulses and gram,	37	...	...	...	...	...	37
Paddy,	...	328	...	...	...	...	328
Jute and other raw fibres,	162	125	5672	7158	5566	5410	24,093
Fibres, manufactures of,	...	...	...	...	...	1100	1,100
Hides,	...	...	...	...	100	90	190
Mustard-seed,	...	...	...	...	89	190	279
Spices and condiments,	...	...	...	265	...	...	265
Sugar, refined,	75	...	...	...	...	...	75
Tobacco,	1847	2273	7485	3826	3446	3056	21,933
Total,	4321	2726	13,157	11,249	9201	9886	50,540
CLASS II.	*No.*	*No.*	*No.*	*No.*	*No.*	*No.*	*No.*
Timber,	...	200	32	...	1078	...	1310
CLASS III.	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*
Miscellaneous native goods,	...	15	...	...	...	70	85

TABLE II. (IMPORTS.)

Description of Goods.	September.	October.	November.	December.	January.	February.	Total.
CLASS I.	*mds.*	*mds.*	*mds.*	*mds.*	*mds.*	*mds.*	*mds.*
Cotton twist (European),	...	...	6	...	...	...	6
Chemicals,	...	...	...	...	...	6	6
Betel-nuts,	143	96	277	95	92	...	703
Pulses and gram,	201	...	244	114	345	60	964
Rice,	...	...	...	100	40	...	140
Paddy,	...	109	...	18	...	...	118
Iron,	...	...	...	34	22	30	86
Copper and brass,	...	...	...	6	16	12	34
Lime and limestone,	110	...	...	...	...	...	110
Mustard-seed,	....	80	...	42	...	...	122
Salt,	747	787	2202	3443	3840	3220	14,239
Spices and condiments,	...	...	12	55	63	2	132
Sugar, refined,	383	3	...	...	...	50	436
Do. unrefined,	...	65	44	109	152	274	644
Tobacco,	....	...	...	30	...	...	30
Total,	1584	1131	2785	4046	4570	3654	17,770
CLASS II.	*No.*	*No.*	*No.*	*No.*	*No.*	*No.*	*No.*
Cocoa-nuts,	7990	...	...	...	...	...	7990
CLASS III.	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*
Leather and its manufactures,	...	...	...	...	200	...	200
Cotton manufact. (European),	...	...	6255	4000	5400	1950	17,605
Miscellaneous (native) goods,	238	15	300	1120	600	300	2,573
Do. (European) do.	...	...	...	...	280	...	280
Total,	238	15	6555	5120	6480	2250	20,658

The total of the exports under Class I. (articles registered by weight only) amounts to 50,540 *maunds*, or 1850 tons, of which jute contributes 47 per cent., and tobacco 43 per cent. Rice is altogether absent from the list. The total of the imports is only 17,770 *maunds*, or 650 tons, 80 per cent. of which is composed of salt. The weight of the exports, therefore, exceeds that of the imports nearly threefold, by 32,770 *maunds*, or 1200 tons. In Class II. (articles registered by number only) there is nothing worthy of notice, except an export of 1310 loads of timber, and an import of 7990 cocoa-nuts in the month of September. Class III. (articles registered by value only) shows an insignificant export of Rs. 85 (£8, 10s. od.) of miscellaneous native goods; while the imports reach a value of Rs. 20,658 (£2065, 16s. od.), of which European cotton goods make up 84 per cent.

With regard to the three staple articles of trade, jute, tobacco, and piece-goods, *The Statistical Reporter* furnishes detailed information for the four months November 1875 to February 1876. Out of a total of 23,806 *maunds* of jute exported from Jalpáigurí during that period, 16,433, or 69 per cent., were consigned to Sirájganj, and 7373, or 31 per cent., were sent through to Goálandá. The chief jute-exporting marts in the District may be arranged in the following order:—Baurá, with 12,907 *maunds*, and Jalpáigurí town, with 855. In the two months of November and December 1875, Baurá exported 7484 *maunds* of tobacco. During the four months, Baurá received Rs. 17,605 of European cotton manufactures, the total import into Jalpáigurí; the whole of this apparently came from Sirájganj in Pábná District.

Capital and Interest.—The current rate of interest in petty loans, where the borrower pawns ornaments or household utensils equal in value to the amount lent, varies, according to circumstances, from twenty-four to sixty per cent. In large loan transactions, where a mortgage is given on immoveable property, such as houses or lands, the rate of interest varies from eighteen to thirty-six per cent. Large transactions of this kind are, however, of rare occurrence. In petty agricultural advances, where a cultivator takes what is called *bhuta*, or an advance from the *jotdár*, to enable him to purchase seed for the cultivation of his land, he pays no interest at all. If, however, he borrows the money as a loan, or a supply of grain as food, he has to repay it with fifty per cent. interest at the close of the year, or at harvest time. In buying a landed estate,

people generally have to pay from eight to twelve years' purchase; but in some instances, where the land is of a fine description, and capable of being materially improved, as much as twenty years' rental has been paid. There are no large banking establishments in Jalpáigurí; loans are chiefly conducted by *jotdárs*, shopkeepers, Márwárí traders, and others.

INSTITUTIONS.—The educational and medical institutions of Jalpáigurí District will be described in a subsequent section of this Statistical Account. The only religious institution is the Bráhma Samáj, a reformed theistic sect of Hindus before described, p. 260. No newspapers are printed or published in the District. The only printing press in 1870 belonged to the Rájá of Kuch Behar, and was used merely for printing office forms for the use of the State. This has now (1876) been removed to Kuch Behar.

ESTIMATED INCOME OF THE DISTRICT.—The Deputy-Commissioner in 1870 returned the estimated income of Jalpáigurí District, as calculated for the purposes of the Income Tax Act of 1870—that is to say, the total of all incomes exceeding £50 a year—at about five *lákhs* of rupees or £50,000. This appears to have been too low an estimate. It would yield an income tax of £1262, at the then rate of $3\frac{1}{8}$ per cent.; whereas the net amount of tax actually realized in 1870-71 was £1965, 4s. 0d. In the following year, 1871-72, the rate of the tax was reduced to $1\frac{1}{24}$ per cent., and the minimum of incomes liable to assessment raised to £75. The net amount of income tax realized in that year was £554, 16s. 0d.

REVENUE AND EXPENDITURE.—Owing to the recent formation of the District, it is not possible to give a comparison of the present revenue and expenditure with the figures of previous years. The District of Jalpáigurí, as at present constituted, was only created in 1869. In the year 1866-67, the total of the principal heads of revenue in the then District of the Western Dwárs amounted to £12,687, and the expenditure to £3101. In 1870-71, after the transfer of the northern *parganás* of Rangpur and their incorporation with the Western Dwárs into the present District of Jalpáigurí, the total of the principal items of revenue amounted to £32,994, and the expenditure to £16,134. Previously to 1869, the revenue and expenditure of the Headquarters Subdivision was included in the accounts of Rangpur, to which District it formerly belonged. The following tables, although they cannot be considered as in any way approaching to a balance sheet of the District, yet show the revenue

and expenditure on all the more important branches of the administration :—

PRINCIPAL HEADS OF REVENUE AND EXPENDITURE FOR THE DISTRICT OF THE WESTERN DWARS IN 1866–67.

REVENUE.		EXPENDITURE.	
Land Revenue,	£10,326 0 0	Land Revenue,	£3,101 2 0
Stamps,	243 12 0		
Excise,	338 18 0		
Miscellaneous,	1,778 12 0		
Total,	£12,687 2 0	Total,	£3,101 2 0

PRINCIPAL HEADS OF REVENUE AND EXPENDITURE FOR JALPAIGURI DISTRICT IN 1870–71.

REVENUE.		EXPENDITURE.	
Land Revenue,	£23,983 16 0	Land Revenue,	£4,934 12 0
Excise,	1,847 18 0	Excise,	104 10 0
Stamps,	3,546 18 0	Stamps,	151 12 0
Law and Justice,	636 6 0	Law and Justice,	1,617 10 0
Income Tax (*Net*),	1,965 4 0	Assessed Taxes,	241 2 0
Registration,	196 14 0	Registration,	188 6 0
Post Office (Cash Collection only),	697 4 8	Post Office,	1,080 19 1
Jail Manufactures (profits),	120 0 11	Jail Maintenance,	527 16 0
		Police,	6,302 8 0
		Education,	463 12 6
		Medical,	522 12 0
Total,	£32,994 1 7	Total,	£16,134 19 7

THE LAND TAX forms upwards of two-thirds of the total revenue of Jalpáigurí District. In 1866-67, before the transfer of the Jalpáigurí Subdivision from Rangpur, the number of *jotdárí* estates on the rent-roll of the Western Dwárs, of which Government is the superior landlord, amounted to 2184, held by 2202 proprietors, paying a total land revenue in that year of £10,326, equal to an average of £4, 14s. 6d. from each estate, or of £4, 13s. 9d. from each individual holder. In accordance with a regulation which has come into force since 1866-67, the Mech cultivators, who are included in the foregoing statement, now pay a capitation tax instead of land revenue. The effect of this change has been to reduce the number of estates on the rent-roll of the Western Dwárs by about 270. In 1870-71, the number of *jotdárí* estates in the Western Dwárs amounted to 1903, held by 1817 *jotdárs*, paying a total revenue in that year of £8724, 10s. 0d., equal to an average of £4, 11s. 8d. from each estate, or of £4, 15s. 9d. by each individual holder. In 1869-70, however, the Jalpáigurí Subdivision was separated from Rangpur District, and, together with the Western Dwárs, was incorporated into the present District of Jalpáigurí. The area thus transferred from Rangpur forms the permanently settled portion of the present District, or the tract lying to the west of the Tístá; the Western Dwárs being treated as a Government estate, and temporarily settled with the *jotdárs*. The permanently settled tract comprises 89 separate *zamíndárí* estates, owned by 179 individual proprietors or coparceners, and paying a total permanently fixed land tax to Government of £13,874, 14s. 0d., equal to an average of £155, 17s. 9d. from each estate, and of £76, 19s. 0d. by each individual proprietor or coparcener. Including the temporarily settled Western Dwárs, of which the Government is the superior landlord, and the permanently settled tract to the west of the Tístá, the rent-roll of Jalpáigurí District in 1870-71 comprised a total of 1992 *jotdárí* and *zamíndárí* estates, held by 1996 individual proprietors or coparceners, paying a total land tax of £22,598, 14s. 0d., equal to an average payment of £11, 6s. 10d. from each estate, or of £11, 6s. 5d. by each individual holder or proprietor.

When the Dwárs were annexed from Bhután, great difficulty was at first experienced in getting the cultivators to pay their rents, and consequently a large number of rent suits had to be instituted in the Civil Courts. In 1866-67, 618 original cases and 222 miscellaneous applications of this nature were instituted in the

Western Dwárs. Since then, however, the husbandmen have taken to paying their rents regularly, and but few such cases are now preferred, the number in 1868-69 being 133 original suits, and 87 miscellaneous applications.

PRINCIPAL ESTATES.—The largest landed estates in Jalpáiguri District are those of Pátgrám and Bodá, belonging to the Rájá of Kuch Behar; and that of Baikunthpur or Battris-hazárí, the property of the Ráikats, a younger branch of the Kuch Behar family. Dr. Buchanan-Hamilton makes the following mention of each of these estates in his MS. Account of Rangpur (1809):—

'PATGRAM ESTATE, which comprises the police division of the same name, is the property of the Kuch Behar Rájá, and contains 62 *mauzás*, or collections of villages. More than half the estate is let to large farmers, some of whom hold under leases called *upanchakí*, which are granted for a certain specified farm, and not according to a particular area, so that their rent cannot be increased nor their lands measured. The *don*, or local land measure, is equal to 15,670 square feet, or 1·08 Calcutta *bighás*. There are thirty *jotdárs* who pay their rents directly into the office of the Rájá's collector; these are called *khárij jotdárs*. The others, who pay their rents to the village officers, are called *dihibandí*. The large farmers let out to under-tenants as much land as suffices to pay their rent, and cultivate the remainder through *prajás*, on the usual sharing tenure. The average rent paid by the *jotdárs* to the Rájá is, I am told, only Rs. 3 for 10 *dons*, equal to 4½ *ánnás* a Calcutta *bighá*, but I believe the tenants have to pay the whole of the village establishment. The people are very poor, shy, and indolent.

'BODA is a very fine estate, also belonging to the Kuch Behar Rájá. It contains 402 *mauzás* or *dihis*, besides 27 large *khárij* farms, such as I have mentioned in Pátgrám. No *lákhiráj* land is mentioned in the Collector's papers; but it is said a very large part has been granted rent-free by the Rájá, both to religious persons and to his own servants. Most of the farms were originally large, but they have in general been reduced to a small size, by subdividing among heirs,—a most ruinous practice, which should be entirely prohibited. The whole estate is divided into *táluks*, and these again into *mahál*s, each of which was originally one farm. In every *táluk* are from two to five *tahutdárs*, who are wealthy farmers appointed by the Rájá according to the wishes of the other tenants, and are usually continued in office for several years. The *tahutdár* finds security for the whole

rent, and receives from the tenants from Rs. 50 to Rs. 175 a year, according to the extent under his charge; the tenants pay the whole village establishment of clerks (*patwáris*), and various kinds of messengers (*sardárs, páiks, kotwáls*, etc.). The lands were not measured when the Settlement of the Rájá's estates was made, the tenants being very averse to such a course, as might naturally be expected, for the rent which they pay is very small. The leases specify neither the term of years for which the holding is let, nor the measurement of the farm, but only the rent stipulated to be paid for the farm. If any tenant goes away, the others pay the rent until they can procure a new tenant, or else they divide the land among themselves. The Rájá has, therefore, no interest, except to collect the rent with as little expense as possible, and to beg and squeeze all that he can from the tenants. There is no economy in the management. In some *táluks* no *tahutdár* can be found, and these are managed by *gumáshtás*, or agents, each with a large establishment. The *tahutdárs*, who are men of property, and who ought to pay their whole rent into the Rájá's office, make delays, so that six *tahsíldárs* or stewards are required to refresh their memories. The twenty-seven original large farms, which are not dependent on the *tahutdárs*, but which, if undivided, would have paid their rents immediately into the Rájá's office, have now subdivided into so many small shares, that a whole host of subordinates is required to manage them. In fact, the Rájá's interests in this estate seem to have been very much neglected.

'BAIKUNTHPUR OR BATTRIS-HAZARI, although part has been alienated to Bhután, is still a very fine estate, and comprises the two entire police divisions of Fakírganj and Sanyásíkátá. It is not included in any *sarkár* or Muhammadan division of the country, having only been added to Bengal since the British assumed the government of the country. A person named Sisu, grandson in the female line of the Koch Hájo (the founder of the Kuch Behar Rájás), is the original ancestor of the Baikunthpur family. It is generally asserted that Sisu was the son of Jirá, the daughter of Hájo; but the family themselves allege that he, as well as Visu (another grandson of Hájo, and the first of the Kuch Behar Rájás who was converted to Hinduism), was the son not of Jirá, but of her sister Hirá, and that his father was the god Siva, on which account all the members of the family assume the name of Deo, and return no salute that is made to them by any person. Sisu, on the con-

version of Visu to Hinduism, took the title of Síb-kumár, or young Siva; he was appointed hereditary Ráikat, or the second person in rank in the Koch kingdom, and received the Baikunthpur estate as an appanage. Síb-kumár was succeeded by his son Mánik, who was followed by his son Marutí. This person had four sons, Síb-deo, Mahádeo, Haraballabh, and Mindeo, and was succeeded by Bhoj, the son of Mahádeo. He, in his turn, was succeeded by his brother Jagat, who had two sons, Viswá and Dharmá. The latter succeeded, and had six sons, the eldest of whom succeeded. He was followed by his brother Vikrám, and by another brother Dharpá, who, in 1771, rebelled against the Rájá of Kuch Behar. This person left three sons, Jayantá, Pratáp, and Umá. The first succeeded to his father, and left the estate to his son Sarbá, now (1809) a minor. Umá is in the service of the Rájá of Kuch Behar, and Pratáp manages the estate, which he does with great care. He has measured the lands, and it is said that he has brought the whole under a regular assessment (*jamá*); so that his conduct in pecuniary concerns seems perfectly honourable towards his nephew. Yet it is alleged that the young Ráikat, soon after his father's death, became alarmed for his personal safety, and fled privately to Rangpur, where he now resides. His mother had sacrificed herself on the funeral pile of his father; and it is probable that he was alarmed without any just foundation, at the instigation of some designing person who wished to obtain the management of the estate. His uncle's learning extends no farther than the mere reading of accounts, and he lives in a thatched hut like a barn; but he retains the pride of his traditional high birth, and returns no person's salute. On his brother's death, his pride prevented him from signing his name to a written offer which he made to the Collector for managing the estate, and also from waiting upon that gentleman, as he would have to humble himself by offering a customary present (*nazar*). The paper, without the applicant's signature, was sent to the Collector by the deceased Ráikat's manager (*díwán*), a Bráhman named Rámánand, who put his own name to the offer, which was accepted. Pratáp was now compelled to overcome his pride, and to visit the Judge and Collector. On explaining the nature of the case, he obtained the management of his nephew's affairs; and the Bráhman was thrown into prison, where he soon afterwards died. The manager of the estate defrays the usual expense of the family in feeding idle vagrants. During the course of the month, from a hundred to two hundred

and fifty are usually fed for one day, and men who are considered as holy are generally detained two or three days longer.

'Formerly, the family resided at Baikunthpur, where there was a little cultivation scattered among the woods; while all the southern part of the estate was allowed to be thickly overgrown with reeds and bushes, as a defence against the Muhammadans. Dharmá Deo, on the decay of the Mughul power, left Baikunthpur and settled at Jalpáiguri. He began to clear the lands in the south, which are now well cultivated; but the tracts in the woods and jungles to the north, which were formerly cultivated, are now neglected. There are no large tenants on the estate, and the rents are still very low, owing probably to the vicinity of Bhután and Gurkhá (Sikkim, then held by the Nepális), where there is much waste land; and a large proportion of the tenants are constantly removing from one jurisdiction into another. The actual rent realized from the tenants is, I understand, about $4\frac{3}{4}$ *ánnás* per *don* of land, good and bad, containing 12,472 square feet, or about 0·86 of a Calcutta *bighá*. The maximum rent for a farm, twenty *don* in extent, is said to be as follows:—House and garden land, Rs. 15; first quality land, Rs. 12; second quality land, Rs. 9; third quality land, Rs. 7; fourth quality land, Rs. 4; total, Rs. 47. Originally, the farms were let by guess measurement, or by *káldarí* or "ploughs." That is, a farm was estimated to contain as much as could be cultivated by a certain number of ploughs, and paid a fixed sum for each, a custom which once probably extended all over Kámrúp. About the year 1788, land measure was first introduced. The whole estate is divided into fifteen *táluks*, and the establishment is a very moderate one. In Sanyásíkátá, which is the largest *táluk*, there is one *tahsíldár* (steward), one clerk (*muharrir*), three inspectors of villages (*pradháns*), one valuer of money (*poddár*), one chief messenger (*sardár*), one assistant messenger (*mírdhá*), four ordinary messengers (*páiks*), one officer (*jamáddár*), and four matchlockmen (*barkandázs*), and four sweepers. There is no subordinate village establishment. The whole are paid by money wages.'

POLICE STATISTICS.—For police purposes, Jalpáiguri is divided into the following *thánás* (police circles):—In the Regulation part of the District—Silíguri or Sanyásíkátá, Fakírganj, Bodá, and Pátgrám. In the Western Dwárs—Mainágurí, Phálákátá, and Alípur; with a permanent outpost station at Dhupgurí, and cold-weather outposts at Benchápárá, Ambárí, and Haldíbarí. The police force

consists of two bodies, the regular or District police, and the village watch or rural constabulary.

THE REGULAR POLICE consisted of the following strength at the end of 1872:—1 superior European Officer or District Superintendent, maintained at a salary of Rs. 500 a month, or £600 a year; 4 first-class subordinate officers, on a salary of upwards of Rs. 100 a month, or £120 a year, and 40 second-class subordinate officers on less than Rs. 100 a month, or £120 pounds a year, the whole maintained at a total cost of Rs. 1602 a month, or £1922, 8s. 0d. a year, equal to an average pay of Rs. 36. 6. 6 a month, or £43, 13s. 0d. a year, for each subordinate officer; together with 12 mounted constables and 212 foot police constables, maintained at a total cost of Rs. 2020 a month, or £2424 a year, equal to an average pay of Rs. 9. 8. 5 a month, or £11, 8s. 7d. a year, for each man. The other expenses connected with the regular police in 1872 were an average sum of Rs. 80 a month, or £96 for the year, for travelling expenses of the District Superintendent; Rs. 187. 9. 4 a month, or £225, 2s. 0d. a year, as pay and travelling expenses for his office establishment; Rs. 234 a month, or £280, 16s. 0d. a year, for horse and travelling allowances of mounted police; and an average of Rs. 526. 6. 8 a month, or £631, 14s. 0d. for the year, for contingencies and all other expenses. The total cost of the regular police of Jalpáiguŕi District for 1872 amounted to Rs. 5150 a month, or £6180 for the year. Total strength of the force, 269 men of all ranks. The area of Jalpáiguŕi District, as returned by the Surveyor-General in 1876, is 2905·64 square miles; and the total District population is 418,048 souls. According to these figures, the strength of the regular police force is one man to every 10·80 square miles of the District area, or one man to every 1556 of the population. The cost of maintenance of the force in 1872 was equal to a charge of Rs. 21. 4. 4 or £2, 2s. 6½d. per square mile of area, or of 2 *ánnás* 4 *pies* or 3½d. per head of the population.

THE VILLAGE WATCH, OR RURAL POLICE, numbered 893 in 1872, maintained either by the villagers or out of the Municipal fund, at an estimated total cost of Rs. 23,218 or £2321, 16s. 0d. As compared with the area and population of the District, there is one village watchman or *chaukídár* to every 3·25 square miles of the District area, or one to every 468 of the population; maintained at an estimated total cost of Rs. 7. 15. 9 or 15s. 11½d. per square mile of area, or 9 *pies* or 1¼d. per head of the population. Each

village watchman has an average of 50 houses under his charge, and receives an average pay in money or lands of Rs. 2. 2. 8 a month, or £2, 12s. od. a year.

Including, therefore, the regular District police and the village watch, the machinery for protecting person and property in Jalpáiguri District in 1872 consisted of a total force of 1162 officers and men, equal to an average of one man to every 2·50 square miles as compared with the District area, or one man to every 360 souls as compared with the population. The aggregate cost of maintaining this force, both from Government and local sources, amounted to an average of Rs. 7084. 13. 4 a month, or a total for the year of £8501, 16s. od.; equal to a charge of Rs. 29. 4. 0 or £2, 18s. 6d. per square mile of the District area, or 3 *ánnás* 2 *pies* or 4¾d. per head of the population.

CRIMINAL STATISTICS.—During the year 1872, 598 'cognisable' cases were reported to the police, of which 99 were discovered to be false, or were not inquired into. Convictions were obtained in 197 cases, or in 39·47 per cent. of the 'true' cases; the proportion of 'true' cases being as 1 to every 839 of the population, and the proportion of cases which resulted in conviction as 1 to every 2073 of the population. Of 'non-cognisable' cases, 420 were instituted, in which 437 persons appeared before the court, of whom 192, or 43·93 per cent., were convicted, the proportion of persons convicted being as 1 to every 2180 of the population.

The following details of the number of cases, and of convictions for different crimes and offences in 1872, are quoted from the Annual Report of the Inspector-General of Police for that year. The 'cognisable' cases were as follow:—Class I. Offences against the State, public tranquillity, and justice — Offences relating to coin, stamps, and Government notes, 1 case, 1 person tried and convicted; other offences against public justice, 10 cases and 7 convictions, 8 persons tried and 7 convicted; rioting or unlawful assembly, 8 cases and 2 convictions, 34 persons tried and 11 convicted; personating public servant or soldier, 1 case and 1 conviction, 2 persons tried and both convicted. Class II. Serious offences against the person—Murder by robbers, 1 case, 3 persons tried, but none convicted; other murders, 5 cases and 2 convictions, 7 persons tried and 5 convicted; culpable homicide, 3 cases, 6 persons tried, but none convicted; rape, 7 cases and 2 convictions, 4 persons tried and 2 convicted; attempt at and abetment of

suicide, 2 cases, 2 persons tried, but no convictions; grievous hurt, 9 cases and 5 convictions, 12 persons tried and 8 convicted; hurt by dangerous weapon, 1 case, no conviction, 2 persons tried; kidnapping or abduction, 2 cases, but no conviction, and no person tried; selling, letting, or unlawfully obtaining a woman for prostitution, 1 case, no conviction, 1 person tried; using criminal force to public servant or woman, or in attempt to commit theft or wrongfully confine, 8 cases and 4 convictions, 5 persons tried and 4 convicted. Class III. Serious offences against person and property, or against property only—*Dakáiti*, or gang robbery, 6 cases and 1 conviction, 10 persons tried and 5 convicted; other robberies, 5 cases and 2 convictions, 4 persons tried and 2 convicted; serious mischief and cognate offences, 4 cases but no conviction, 1 person tried; lurking house-trespass, or housebreaking with intent to commit an offence, or after having made preparation for hurt, 176 cases and 19 convictions, 31 persons tried and 24 convicted; receiving stolen property by *dakáiti*, or habitually, 1 case and 1 conviction, 2 persons tried and convicted. Class IV. Minor offences against the person—Wrongful restraint and confinement, 23 cases and 7 convictions, 32 persons tried and 20 convicted. Class V. Minor offences against property—Lurking house-trespass or housebreaking, 2 cases and 1 conviction, 3 persons tried and 2 convicted; cattle theft, 25 cases and 10 convictions, 26 persons tried and 11 convicted; ordinary theft, 155 cases and 39 convictions, 90 persons tried and 60 convicted; criminal breach of trust, 11 cases and 3 convictions, 9 persons tried and 3 convicted; receiving stolen property, 25 cases and 20 convictions, 29 persons tried and 25 convicted; criminal or house-trespass, 49 cases and 16 convictions, 87 persons tried and 29 convicted. Class VI. Other offences not specified above—Offences against religion, 1 case, no conviction; offences against the excise laws, 3 cases and 1 conviction, 1 person tried and convicted; public and local nuisances, 53 cases and 54 convictions, 69 persons tried and all convicted. Total of 'cognisable' cases reported during the year, 598; of which 99 were discovered to be false, or were not inquired into. Deducting these, there were altogether 499 cases investigated, of which convictions were obtained in 197, or 39·47 per cent. of the whole. The number of persons actually tried was 482, of whom 292 or 60·58 per cent. were convicted, 276 summarily by the Magistrate, and 16 by the Sessions Court.

The number of cases instituted, and of persons tried and convicted, in 'non-cognisable' cases during 1872, is returned as follows:—Class I. Offences against the State, public tranquillity, and justice—Offences against public justice, 16 cases, 32 persons tried and 29 convicted; offences by public servants, 7 cases, 9 persons tried and 4 convicted; false evidence, false complaints and claims, 19 cases, 19 persons tried and 10 convicted; forgery, or fraudulently using forged documents, 10 cases, 12 persons tried and 3 convicted; rioting, unlawful assembly, and affrays, 1 case, 3 persons tried and all convicted. Class II. Serious offences against the person—*nil.* Class III. Serious offences against property—Extortion, 10 cases, 17 persons tried, but none convicted. Class IV. Minor offences against the person—Criminal force, 187 cases, 161 persons tried and 48 convicted; hurt, 9 cases, 13 persons tried and 5 convicted. Class V. Minor offences against property—Cheating, 27 cases, 14 persons tried and 1 convicted; criminal misappropriation of property, 5 cases, 5 persons tried and 4 convicted; criminal breach of trust by public servants, bankers, etc., 1 case, 1 person tried but not convicted; [illegible] mischief, 56 cases, 76 persons tried and 37 convicted. Class VI. Other offences not specified above—Offences relating to marriage, 24 cases, 14 persons tried and 1 convicted; criminal breach of contract of service, 4 cases, 2 persons tried and 1 convicted; defamation, 5 cases, 2 persons tried but no conviction; criminal breach of contract of service, 4 cases, 2 persons tried and 1 convicted; intimidation and insult, 5 cases, 10 persons tried and 7 convicted; public and local nuisances, 1 case, 1 person tried, no conviction; offences under chapters xviii., xx., xxi., and xxii. of the Criminal Procedure Code, 6 cases, 5 persons tried and 4 convicted; offences under the Ferry Act, 2 cases, 2 persons tried and convicted; offences under the Cattle Trespass Act, 11 cases, 10 persons tried and 4 convicted; offences under the Police Act, 6 cases, 6 persons tried and all convicted; offences under the Arms Act, 6 cases, 21 persons tried and all convicted; offences under the Jail Act, 2 cases, 2 persons tried and both convicted. Total of 'non-cognisable' cases, 420, in which 437 persons were tried and 192 convicted; proportion of persons convicted to persons tried, 43·93 per cent.

Excluding 99 cases declared to be false by the Magistrate, the total number of 'cognisable' and 'non-cognisable' cases investigated in Jalpáigurí District in 1872 was 919, in which exactly the same

number of 919 persons were tried; of whom 484 or 52·66 per cent. were convicted, or one person convicted of an offence of some kind or another to every 865 of the population.

Jail Statistics.—There is only one jail in Jalpáigurí, viz. the District Jail at the Civil Station. The following figures, showing the jail population of the District for 1870 and 1872, are taken partly from a return specially furnished by the Inspector-General of Jails, and partly from the annual reports of the Inspector-General. As the District of Jalpáigurí was only constituted in 1869, I am unable to give statistics for earlier years. In 1870, the daily average number of prisoners in the Jalpáigurí jail was 118, the total number of criminal, under-trial, and civil prisoners admitted during the year being 409. The discharges were as follow:—Transferred, 2; released, 399; escaped, 2; died, 9; total, 412. The number of prisoners admitted into hospital amounted to 138·98 per cent., and the deaths to 7·62 per cent. of the average jail population. The average cost of maintenance in the Jalpáigurí jail in 1870, including rations, establishment, hospital charges, contingencies, and all other charges except the cost of the prison police guard, amounted to £4, 9s. 6d. per head. The cost of the jail police guard amounted to an average of £1, 13s. 11d., making a gross charge to Government of £6, 3s. 5d. per head. The total credits arising from jail manufactures in 1870 amounted to £131, 11s. 7d., and the total debits to £11, 10s. 8d., leaving an excess of receipts over charges, or a profit, of £120, 0s. 11d.; average earnings by each prisoner engaged in manufacture, £4, 2s. 9½d.

In 1872 the statistics of the jail were as follow:—The daily average number of civil prisoners in jail was 92; of under-trial prisoners, 12·34; of labouring convicts, 46·66; of non-labouring convicts, 1·34; total, 61·26, of whom 1·11 were females. These figures indicate one male prisoner always in jail to every 3599 of the male population. The total cost of the jail in 1872, excluding public works and manufacture department, amounted to £696, 18s. 0d., or a gross average of £11, 8s. 6d. per prisoner. The results of the manufacture department were as follow:—Total credits, £95, 14s. 0d.; total debits, £78, 5s. 2d.; excess of credits over debits, or profit, £17, 8s. 10d. Out of the 46·66 labouring convicts, only 11·05 were employed in manufactures or gardening; the remainder were either engaged in prison duties or public works, or were in hospital, or weak and unable to labour.

dings consist of a palisade of bamboos of ...ight, enclosing several bamboo-made barracks and other buildings. The jail was constructed in 1871, in what was considered a healthy spot, but the results have been by no means favourable in this respect. In 1872, out of a daily average of 61·26 prisoners, the deaths amounted to 26, or 42·62 per cent. This excessive mortality was chiefly due to an outbreak of cholera which occurred in the jail, and which is said to have been due to the introduction of drinking water containing choleraic excreta from outside the jail, where the disease prevailed from April to November. This outbreak caused 20 deaths. Apart from cholera, however, the health of the jail was not good, as the mortality, exclusive of that disease, amounted to 10 per cent. of the average prison population. In the following year, 1873, out of a daily average of 90·37 prisoners, the deaths in the jail fell to 5, of which 1 was due to cholera, the total death-rate being 5·55 per cent. of the jail population. In the next year, however, the jail had an average population of 147·79 inmates, and the deaths again rose to 40, or 27·06 per cent. His Honour the Lieutenant-Governor, in his Resolution on the Bengal Jail Report for 1874, in speaking of this excessive death-rate, makes the following remarks:—'Little explanation can be afforded of this great mortality. The site of the jail is said to be fairly good, the water excellent, and the accommodation for prisoners ample. Every care has been bestowed upon the sick, and every precaution possible has been taken against disease. Still 66·24 per cent. of the average number of convicts were attacked with dysentery and diarrhœa, and 16·15 per cent. died of these diseases; while 24 per cent. suffered from remittent or intermittent fever, from the effects of which 3·22 per cent. died. From these facts, and the results of local inquiries, the Inspector-General would appear to hold that the marked unhealthiness of this jail was owing to some widespread climatic causes, rather than to any purely local influence.'

Educational Statistics.—The comparative table on p. 314, exhibiting the number of schools and pupils, with a return of revenue and expenditure for each class of schools, in Jalpáigurí District for 1870-71, 1871-72, and 1872-73, is compiled from the Annual Reports of the Educational Department for those years. The table shows that in 1870-71 there were 64 Government and Aided schools in Jalpáigurí, with a total of 1372 pupils, educated at a cost of £855,

[*Sentence continued on page* 315

Comparative Table showing the State of Education in Jalpaiguri District for the Three Years 1870-71, 1871-72, and 1872-73.

Classification of Schools.	Number of Schools.			Number of Pupils on 31st March of each year.			Average Attendance.			Receipts. From Government.			Receipts. From other Sources			Total Expenditure.		
	1870-71	1871-72	1872-73	1870-71	1871-72	1872-73	1870-71	1871-72	1872 73	1870-71	1871-72	1872-73	1870-71	1871-72	1872-73	1870-71	1871-72	1872-73
										£ s. d	£ s. d	£ s. d	£ s. d	£ s. d	£ s. d	£ s. d	£ s. d	£ s. d
Middle Schools—																		
Government, .	1	1	1	77	61	76	44	39	64	24 0 0	10 13 8	23 16 0	7 11 7	9 18 4	9 16 0	31 11 7	20 12 0	27 8 0
Aided, . . .	14	11	12	504	401	469	316	288	452	212 4 6	231 4 6	220 5 8	288 2 0	318 8 5	322 3 4	494 15 2	549 13 0	505 16 7
Unaided (inspected),	...	...	6	...	...	163	...	...	152	...	...	...	...	...	95 14 0	...	...	95 5 10
Total, .	15	12	19	581	462	708	360	327	668	236 4 6	241 13 8	244 1 8	295 13 7	328 6 9	427 13 4	526 6 9	570 5 0	628 10 5
Primary Schools—																		
Aided, . . .	41	19[1]	37	674	213	607	505	134	557	193 2 0	102 0 0	93 5 5	86 16 0	38 6 0	99 2 11	278 0 0	140 6 0	192 8 5
Girls' Schools—																		
Aided, . . .	8	4	1	117	61	13	67	50	17	34 6 0	30 10 0	16 16 0	16 19 0	16 19 0	16 19 0	51 5 0	47 9 0	33 15 0
Unaided (inspected),	...	...	4	...	...	30	...	...	25	...	...	...	...	...	...	...	...	...
Total, .	8	4	5	117	61	43	67	50	42	34 6 0	30 10 0	16 16 0	16 19 0	16 19 0	16 19 0	51 5 0	47 9 0	33 15 0
Grand Total, .	64	35	61	1372	736	1358	932	511	1267	463 12 6	374 8 2	354 3 1	399 8 7	383 11 9	543 15 3	855 11 9	758 0 0	854 13 10

[1] Two of these Schools are really within Rangpur District, and were erroneously returned by the Deputy Inspector as being situated in Jalpáiguri.

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11s. 9d., of which Government contributed £463, 12s. 6d. In the following year, 1871-72, 35 Government and Aided schools are returned, attended by a total of 736 pupils, educated at a cost of £758, of which Government contributed £374, 8s. 2d. In 1872-73, there were altogether 61 schools returned in the Education Report (including 10 unaided but inspected schools), attended by a total of 1358 pupils, educated at a cost of £854, 13s. 10d., of which the State contribution amounted to £354, 3s. 1d. It is evident, therefore, from these figures, that the state of education in Jalpáigurí made no appreciable increase during the three years; and that in 1871-72 there was a very considerable drop, both in the number of schools and pupils, which is not commented upon or explained in the Education Report for that year.

The following paragraphs, illustrating the state of education in Jalpáigurí District, are quoted in a condensed form from the Inspector's Report, given at length on pp. 98-100 of the Annual Report of the Educational Department for 1872-73 :—

'General State of Education.—The Deputy-Commissioner remarks that education has been very backward in this District, except in the Bodá division. The people do not live in villages, or congregations of houses, but as a rule, in solitary homesteads, scattered at some little distance from each other. As the population is purely agricultural, the boys at an early age are valuable for many purposes, and hence are not sent to schools situated at a distance from their homes. These remarks are especially applicable to the Western Dwárs. Another cause operating against education is the absence of an upper or wealthy class in the District, the population being almost entirely composed of Rájbansís and lower-class Muhammadans, holding small *jots*. Added to these natural disadvantages, has been the very defective system under which education was, till very lately, controlled.

'At the close of the year 1872-73, there were in Jalpáigurí District 61 schools with 1358 pupils, against 35 schools with 736 pupils in 1871-72, showing an increase in one year of 26 schools and 622 pupils. Twenty of these are *páthsálás*, receiving grant-in-aid under the orders of the Lieutenant-Governor of the 30th September; and the Deputy-Commissioner reports that additional *páthsálás* are being rapidly opened in suitable spots. In the Dwárs, great difficulty is experienced in establishing schools. The climate is

bad, so that teachers can hardly be induced to go into these parts; besides, there are no regular villages, the people living in separate homesteads, so that it is not easy to select sites for schools; and where there are any schools, they are poorly attended. There is one tribe, however, who congregate together more than the Rájbansís. These are the Mechs, who live socially with one another, and build neat and clean villages. The Deputy-Commissioner writes of them: "They are a bright, intelligent race, and I am anxious to give them some means of education. They have no written language, and their numbers are too small to make it an object to instruct them in their own spoken vernacular. They use Bengalí as their medium of intercourse, and I would suggest primary education in Bengalí as most adapted to their wants. The difficulty will be, to get men to live in the unhealthy jungles where Mechs are to be found. It is proposed, however, to establish one or two experimental schools in selected Mech localities during 1873-74, to be kept open during the healthy season of the year, and thus endeavour to create a taste for learning; and also to educate a few Mechs as teachers. It is intended to employ the influence of a Mech *tahsíldár* in carrying out this arrangement. For the Rajbánsís living in the Dwárs, there is a middle-class English school at the Subdivisional station of Phálákátá; and *páthsálás* (primary schools) at Mainágurí, Chengmárí, Shopíbárí, Amgurí, Pahárpur, Alípur, Bhatibárí, and Haldbárí."

'HIGHER SCHOOLS.—There is no higher-class school in this District, and the want of one is very much felt. I would suggest that Government be asked either to establish a Government District school at Jalpáigurí, or to increase the aid which it now gives, so as to enable the Jalpáigurí school to maintain a staff of teachers similar to that in the District schools all over Bengal. That Government would be repaid for a little extra expenditure, is, I think, very evident, since a better class of writers would be supplied to its offices in Jalpáigurí for the same pay, if qualified men could be obtained on the spot. As it is, the Deputy-Commissioner states that he never before experienced such difficulty in obtaining ordinarily fair English copyists as in Jalpáigurí. The middle-class English school at Jalpáigurí town has been considerably improved during the year 1872-73, extra subscriptions having been collected, and a B.A. sent there as head-master. But *one* good man, able to teach up to the entrance standard, cannot place a school on a

footing with Government District schools, which generally have two or more such men. In any event, I would request that some increase be made to the present grant allowed to the school. The amount now given by Government is £5 a month; and if this sum were doubled, it would go far, with the additional subscriptions raised, towards bringing the school up to the status of a higher-class school. The Deputy-Commissioner states that some boys, who in former years had passed the minor scholarship examination, abandoned their studies, having finished the highest course the District could offer, and being unwilling to leave their parents and go to other Districts.

'MIDDLE-CLASS AIDED ENGLISH SCHOOLS.—I learn from the Deputy-Inspector's Report, that two of the four schools of this class, which were in existence at the close of the year 1871-72, have been converted into purely vernacular schools. The reason for this change was, that, as English schools, they had proved failures owing to the want of qualified teachers—a want which is accounted for by there being no higher-class school in the District. The Jalpáiguri middle-class English school has been recently raised, as stated above, to very nearly the rank of a higher-class District school. All its candidates, four in number, passed the minor scholarship examination; and the two from the vernacular department passed the vernacular scholarship examination. The other middle-class English school, which is placed at Krishnaganj, was closed for several months of the year, owing to the local subscriptions failing; it revived, however, on obtaining a grant from the Kuch Behar State, and is now reported to be working well.

'MIDDLE-CLASS VERNACULAR SCHOOLS.—The Bodá model school is the only middle-class Government vernacular school in the District. It is reported to be doing well, and has lately had an increase to its establishment sanctioned by the District School Committee. Two out of four candidates passed the vernacular scholarship examination. The Deputy-Inspector states: "A good model school for some locality in the Dwárs is urgently required." Excepting the school at Titályá, the middle-class aided vernacular schools do not seem to be thriving institutions, and the Deputy-Inspector complains that almost all the *pandits* are inefficient. The middle-class aided girls' school still (1873) continues to exist, with thirteen girls on its rolls. It is not, however, supposed that it will be able to survive much longer, since the Kuch Behar grant has lately been transferred

from it to the model school.' [The Commissioner of the Division adds: 'This was a private school, held in the house of an Honorary Magistrate; the only girls attending were those of his own family, and as his circumstances were such that he could educate his children, I withdrew the aid, and applied it where it really was required.'] 'The Deputy-Collector mentions six middle-class unaided vernacular schools. Two of these receive £2 a month from the Kuch Behar State.

'PRIMARY SCHOOLS.—At the close of the year 1871-72, there were 19 *páthsálás* returned as in Jalpáiguri District; two of these, however, were really situated in Rangpur. Twenty new *páthsálás* were started during the year under report, so that there are now (1873) 37 such schools in the District. The Deputy-Inspector writes: "The more frequently and vigilantly *páthsálás* are inspected, the more diligently the *pandits* do their work; but the desired amount of supervision cannot be exercised over such an extensive area without an assistant."' [The Commissioner of the Division adds that an additional officer has since been nominated.] 'The institution of the system of primary scholarships has infused an active spirit of emulation among the *páthsálá* teachers. The four unaided girls' *páthsálás* will next year be included under the head of *páthsálás* sanctioned under the orders of the 30th September 1872, since I understand they were to receive grants from 1st April 1873.

'UNINSPECTED INDIGENOUS EDUCATION.—The information on this head is meagre in the extreme. The Deputy-Commissioner of the District does not allude to any such schools; the Deputy-Inspector of schools says he has no correct information as to the number of unaided *páthsálás*, but thinks that 15 will not be far wide of the truth. Taking the average attendance at each of these schools to be 16, it would give a total of 240 boys receiving instruction at uninspected and unaided primary schools.'

SIR GEORGE CAMPBELL'S EDUCATIONAL REFORMS.—The influence of Sir George Campbell's educational reforms, which came into operation in September 1872, may be learnt from a comparison of the figures for 1871-72 with those of 1873-74. In the former year there were only 35 schools returned as within the whole District under Government inspection, attended by a total of 736 pupils; in 1873-74, the schools had increased to 84, or by nearly 150 per cent.; and the pupils to 2043, or by 175 per cent. In the latter year, there was one school to every 34·50 square miles of the

District area, or one to every 4984 of the population; and one pupil at school to every 205 of the population.

POSTAL STATISTICS.—A rapid development in the use of the post office has taken place of late years, but an exact comparison of the rate of increase cannot be made, owing to the recent formation of the District as at present constituted. Figures furnished to me by the Director-General of Post Offices, show that the number of letters, newspapers, parcels, and books, received in the Jalpáigurí Subdivision of Rangpur in 1861-62 (before the annexation of the Western Dwárs), amounted to 15,098; in 1865-66 (shortly after the annexation of the Dwárs), the number had risen to 101,734; and in 1870-71, it stood at 101,084. The number of letters, newspapers, parcels, and books, despatched from the District, increased from 15,182 in 1861-62, to 57,450 in 1865-66. I have not succeeded in obtaining a return of the number of letters, etc. despatched in 1870-71. In 1860-61, the cash collection of the post office (excluding the amount realized by sale of postage stamps, for which I have no return), amounted to £43, 10s. 2d.; in 1865-66, to £49, 1s. 0d.; and in 1870-71, to £697, 4s. 8d. The total postal expenditure in 1861-62 amounted to £144, 0s. 0d.; in 1865-66, to £279, 11s. 0d.; and in 1870-71, to £1080, 19s. 1d. The following table, showing the number of letters received at and despatched from the District Post Office, together with the cash receipts and total expenditure of the post office, for the years 1861-62, 1865-66, and 1870-71, is compiled from a return specially furnished to me by the Director-General of Post Offices:—

POSTAL STATISTICS OF JALPAIGURI DISTRICT FOR THE YEARS 1861-62, 1865-66, AND 1870-71.

	1861-62.		1865-66		1870-71.	
	Received.	Despatched.	Received.	Despatched	Received.	Despatched
Letters, ...	12,374	14,644	86,096	53,238	89,404	*Materials not received for this column.*
Newspapers, . .	2,430	412	12,909	3,234	8,718	
Parcels, ...	147	57	2,213	846	1,278	
Books, ...	147	69	516	132	1,684	
Total, . . .	15,098	15,182	101,734	57,450	101,084	
	£ s. d.		£ s. d.		£ s. d.	
Cash Collections (exclusive of Sale of Postage Stamps),	43 10 2		49 1 0		697 4 8	
Total Expenditure, .	144 0 0		279 11 0		1,080 19 1	

CLIMATE, TEMPERATURE, AND RAINFALL.—With the exception that the rains set in earlier than in Southern Bengal, and that they are heavier, the seasons of Jalpáigurí are much the same as in the Districts to the south. During the cold-weather months the dews are very heavy, and fogs and mists are of daily occurrence. The prevailing direction of the wind is easterly, and thunderstorms are of frequent occurrence in the months of March, April, and May. The Civil Surgeon returns the average temperature at about 76°. The following return of rainfall at each of the three towns in the District for 1871 and 1872 is taken from the Annual Meteorological Report for those years :—(1) Jalpáigurí, 1871—January, *nil;* February, 0·19 inches; March, 4·17 inches; April, 3·68 inches; May, 4·87 inches; June, 16·69 inches; July, 28·54 inches; August, 20·84 inches; September, 11·52 inches; October, 1·36 inches; November and December, *nil;* total, 91·86 inches. 1872—January, 0·96 inches; February, *nil;* March, 0·65 inches; April, 6·83 inches; May, 11·03 inches; June, 23·76 inches; July, 23·80 inches; August, 26·98 inches; September, 22·98 inches; October, 8·98 inches; November, 0·03 inches; total, 126 inches; number of days on which rain fell in 1872, 106. (2) Bodá, 1871—January, *nil;* February, 0·03 inches; March, 1·13 inches; April, 2·92 inches; May, 6·63 inches; June, 16·08 inches; July, 14·46 inches; August, 16·17 inches; September, 8·18 inches; October, November, and December, *nil;* total, 65·60 inches. 1872—January, 2·00 inches; February, 0·10 inches; March, *nil;* April, 0·88 inches; May, 5·57 inches; June, 0·34 inches; July, 5·55 inches; August, 17·78 inches; September, 42·55 inches; October, 10·63 inches; total, 85·40 inches; number of days on which rain fell in 1872, 60. (3) Titályá, 1871—January, 0·01 inches; February, 0·07 inches; March, 3·15 inches; April, 3·15 inches; May, 4·23 inches; June, 11·67 inches; July, 20·83 inches; August, 23·20 inches; September, 15·74 inches; October, 0·44 inches; November and December, *nil;* total, 82·49 inches. 1872—January 1·28 inches; February, 0·10 inches; March, *nil;* April, 2·39 inches; May, 7·22 inches; June, 19·08 inches; July, 27·89 inches; August, 41·48 inches; September, 22·57 inches; October, 6·16 inches; November and December, *nil;* total, 128·17 inches; number of days on which rain fell in 1872, 95.

In the Western Dwárs, the rainfall is much heavier than in the Regulation part of the District, particularly in the northern tracts,

just
medical officer in charge of the [illegible] ported to me in 1870, that in that tract there are prop[illegible] seasons,—a cold and bracing season, during which litt[illegible] falls, extending from October to the middle of April; and a rainy season, beginning in the middle of April, and continuing up to the end of September, keeping the air almost completely saturated with moisture. The latter season is very relaxing. The Meteorological Department returns the rainfall at Baxá for the years 1871 and 1872 as follows:—1871—January, *nil*; February, 0·70 inches; March, 2·60 inches; April, 8·65 inches; May, 16·11 inches; June, 25·32 inches; July, 60·36 inches; August, 32·19 inches; September, 25·20 inches; October, 7·59 inches; November, 2·74 inches; December, 0·16 inches; total, 181·62 inches. 1872—January, 0·98 inches; February, 0·97 inches; March, 0·50 inches; April, 7·75 inches; May, 14·88 inches; June, 45·01 inches; July, 39·06 inches; August, 38·21 inches; September, 37·53 inches; October, 9·62 inches; November, 0·28 inches; December, 0·04 inches; total, 194·83 inches; number of days on which rain fell in 1872, 139. The above rainfall, heavy as it is, appears to be considerably below the ordinary average, as the Meteorological Report for 1872 returns the average rainfall for the three previous years at 280·22 inches; showing a deficiency in 1871 of 98·60 inches; and in 1872 of 85·69 inches. The medical officer in charge of the troops returns the average temperature of Baxá in 1869 at 73·90°.

Diseases.—The principal endemic diseases of the District are the following:—Malarious fevers, both remittent and intermittent, with all their complications and sequelæ. These fevers are attributed to the malaria generated by the decomposition of the rank vegetation which abounds throughout the District. They are most prevalent about the beginning and end of the rains, in the months of March and April, and in September and October. The remittent fevers of the *taráí* are of a very severe and exhausting type. The Mechs who inhabit this tract, which runs along the foot of the hills, do not appear to suffer much from these fevers, notwithstanding the malarious character of the locality; but Europeans, and natives from other parts, readily succumb. Splenetic affections, enlargement of the liver, anæmia and anarsarca, all of malarious origin, are common throughout Jalpáigurí, but perhaps not to such an extent as in the more southerly Districts of Bengal. Among bowel-com-

plaints, diarrh[illegible] latter
[illegible]a. [illegible] cold weather,
depend for its production mainly on the damp and
[illegible]ature of the climate, and also to some extent on bad food. The medical officer of Baxá reported in 1870 that scurvy was very prevalent among the men of the native infantry regiment stationed there; and he stated that the disease appears to have affected all the regiments which had served there since the annexation of the Dwárs, being brought on by the want of fresh vegetables. Vegetables can only be cultivated at Baxá during the cold season, in consequence of the severity of the rains, which also, by impeding communications, prevents their importation from the plains below during the wet season. Goitre, called *bawá* by the Bhutiás, is very common in the District, more especially in the hilly tract of the Dwárs. It is attributed to the existence of some noxious ingredient in the water, and is also said to be hereditary. Leprosy is not very common; cases of elephantiasis of the leg and the scrotum are occasionally found. Rheumatic affections are very common in the cold weather; but much of the rheumatism of the District is said to be due to venereal complaints. The inhabitants of Jalpáigurí are in the habit of surrounding their villages with a continuous bamboo hedge, in the belief that it contributes to healthiness. The Civil Surgeon stated, in 1870, that no facts regarding the effects of drainage, jungle clearing, increased cultivation, or other sanitary efforts towards the general health of the people, had been brought to his knowledge. Cultivation was being rapidly extended in the Dwárs, but the change was too recent to allow of any decided opinion regarding its influence. The yearly process of burning the dense grass and jungle in the Western Dwárs, however, has undoubtedly a good effect in lessening the production of malaria, although not undertaken for that purpose.

Cholera.—The only disease which makes its appearance in an epidemic form is cholera. It is said to have prevailed throughout the District in 1865, especially among a gang of prisoners from the Rangpur jail, who were engaged in building barracks for troops at Jalpesh, large numbers of whom died. In April 1869, a well-marked invasion of epidemic cholera occurred, in the east and west parts of the District. The disease spread northward from the State of Kuch Behar, which it had previously ravaged; and also from the Districts of Rangpur and Purniah, where it prevailed in a virulent form. It

advan[illegible]
ages, and castes alike, and sparing few [illegible]
places the people abandoned their homes and fled before the dreaded disease. In the Regulation portion of the District, the disease seemed to have followed the main line of road, appearing simultaneously at Titályá and Silígurí. It was also heard of in the south of Jalpáigurí town, in the tract bordering on Rangpur District. The Civil Station itself and places in its vicinity, and also the northern tracts, escaped with only a few sporadic cases. The heavy rains which set in in the month of May completely put a stop to the outbreak; but it is worth notice, that after the subsidence of the rains a few sporadic cases of cholera occurred at places where the disease had raged its worst. No statistics exist showing the number of cases which occurred during this epidemic, or of the rate of mortality. Another outbreak occurred in 1872, and lasted from April to November. There is nothing to show the number of persons attacked, or of the rate of mortality among the general population; but in the jail, out of a daily average of 61·26 prisoners, 20 deaths from cholera occurred within thirty-five days. No records exist of any outbreak of epidemic small-pox or cattle disease.

Vital Statistics.—Since 1872, a system of mortuary registration for certain selected urban and rural areas has been introduced throughout Bengal. In Jalpáigurí District, the selected urban area is that of Jalpáigurí town and certain outlying villages, with a total population of 6281. In 1873, the number of deaths within this area amounted to 157, or 24·99 per thousand. The selected rural area is *parganá* Mainágurí, with a total population of 48,185; of whom 664, or 13·78 per thousand, are reported to have died in 1873.

Charitable Dispensaries.—There are three charitable dispensaries in the District, viz. at Jalpáigurí town, at Titályá, and at Bodá. The following table (on p. 234) illustrates the relief afforded by these institutions in 1872, showing also the proportion of the cost borne by Government, together with the amount realized by private subscriptions, or from other sources. The prevailing diseases are fever, bowel complaints, rheumatic affections, and venereal diseases. The high death-rate among in-door patients is owing to the fact that the people are averse to accepting this form of relief unless very seriously ill. The out-door patients, especially at the Jalpáigurí Dispensary, continue to gradually increase in number.

MEDICAL CHARITIES OF JALPAIGURI DISTRICT IN THE YEAR 1872

DISPENSARIES	Year in which Dispensary was Opened	IN DOOR PATIENTS							OUT DOOR PATIENTS		INCOME						Total Expenditure		
		Total Number Treated	Cured or Relieved	Not Improved, or who ceased to Attend	Died	Remaining in Hospital at end of Year	Percentage of Deaths to Treated	Daily Average Number of Sick	Total Treated	Average Daily Attendance	Government Contributions, & Doctor's Salary and Gratuitous Medicine			Subscriptions, Donations, etc			Total Income					
											£	s	d	£	s	d	£	s	d	£	s	d
Jalpaiguri,	1866	166	117	6	34	9	20 48	7 91	4793	32 86	286	18	0	121	18	0	408	16	0	428	8	0
Titalya,	1866	34	23	1	7	3	20 58	1 16	1406	22 69	46	6	0	43	10	0	89	16	0	85	8	0
Boda, .	1868	22	14	3	5		22 72	0 68	911	11 30	69	8	0	36	18	0	106	6	0	97	16	0
Total, . .		222	154	10	46	12	20 72	...	7110		402	12	0	202	6	0	604	18	0	611	12	0

or otherwise, which enter into the pharmacopœia of the native Hindu medical practitioner. For the scientific identifications I am compelled to trust entirely to the Civil Surgeon; in the verification of the spelling, Dr. Forbes Watson's *List of Indian Products* has been followed.

Drugs Indigenous to the District.—*Dhenus* (Abelmoschus esculentus); *kunch* (Abrus precatorius); *upang* (Achyranthes aspera); *bach* (Acorus calamus); *bel* (Ægle marmelos); *chiretá* (Agathotes chirayta); *ghritá kumárí* (Aloe Indica); *kulinjan* (Alpinia galanga); *chátín* (Alstonia scholaris); *kálap-náth* (Andrographis paniculata); *khas-khas* (Andropogon muricatum); *síál-kántá* (Argemone Mexicana); *nim* (Azadirachta Indica); *dhak* or *palás* (Butea frondosa); *kát-káranjá* (Cæsalpinia bonducella); *bakam* (Cæsalpinia sappan); *akhund* (Calatropis gigantea); *gánjá* (Cannabis Indica); *lánká marich* (Capsicum annuum); *son-alu* (Cassia fistula); *mom* or wax (Cera flava); *bhánt* (Clerodendron viscosum); *dhaniyá* (Coriandum sativum); *jáipál* (Croton tiglium); *indrawán* (Cucumis pseudo-colocynthis); *katki* (Cucumis utilissimus); *bágh bharenda* (Jatropha curcas); *haldí* (Curcuma longa); *bán-haldí* (Curcuma zedoaria); *muthá* (Cyperus hexastachylus); *dhuturá* (Datura alba); *amlá* (Emblica officinalis); *munsá sij* (Euphorbia ligularia); *jaishtha madhu* (Glycyrrhiza glabra); *nil* (Indigofera tinctoria); *ajáwán* (Ligustrum ajowan); *ám* (Mangifera Indica); *pudiná* (Mentha sativa); *karelá* (Momordica charantia); *sujina* (Moringa pterygosperma); *tamák* (Nicotiana tabacum); *sáluk* (Nymphœa lotus); *amrul* (Oxalis corniculata); *bara ghakru* (Pedalium murex); *pipul* (Piper longum); *raktáchandan* (Pterocarpus santalinus); *anar* (Punica granatum); *erendí* (Ricinus communis); *jangli piyáj* (Urginea Indica); *til* (Sesamum orientale); *sádá sarishá* (Sinapis alba); *kálá sarishá* (Sinapis nigra); *tentul* (Tamarindus Indica); *haritaki* (Terminalia chebula); *methi* (Trigonella fœnum-græcum); *adrakh* (Zinziber officinale); *buch* (Zinziber zerumbet).

Drugs Sold in the Bazars.—*Báblá* (Acacia Arabica); *átis* (Aconitum heterophyllum); *jangli akrot* (Aleurites triloba); *jawási* (Alhagi maurorum); *iláchí* (Amomum cardamomum); *hijlí badám* (Anacardium occidentale); *akarkora* (Anthemis pyrethrum); *chiná badám* (Arachis hypogœa); *gochru* (Asteracantha longifolia); *kotillá* (Astragalus virus); *gugal* (Balsamodendron mukul); *mahuá*

(Bassia latifolia); *rasut* (Berberis lycium); *gandhá berosa* (Boswellia thurifera); *jita* (Carum album); *lang* (Carophyllus aromaticus); *tezpát* (Cinnamomum albiflorum); *dál chiní* (Cinnamomum zeylanicum); *nebu* (Citrus, numerous varieties); *golanchá* (Cocculus cordifolius); *nárikel* (Cocos nucifera); *bihidáná* (Cydonia vulgaris); *garjan tel* (Dipterocarpus lævis); *takhm balangá* (Dracocephalum royleanum); *chhotá iláchí* (Elettaria cardamomum); *panmuri* (Fœniculum panmorium); *chaulmugra* (Gynocardia odorata); *kálá kutkí* (Helleborus nigra); *khorassani ajáwán* (Hyoscyamus niger); *kapur* (Laurus camphora); *hálím* (Lapidium sativum); *tísí* (Linum usitatissimum); *jáiphal* (Myristica officinalis); *jatámansi* (Nardostachys jatamansi); *hing* (Narthex asafœtida); *kálá-jirá* (Nigella sativa); *khet-paprá* (Oldenlandia biflora); *salep misrí* (Orchis mascula); *áphín* (Papaver somniferum); *kálá-dáná* (Pharbitis nil); *gandhaberoza* (Pinus longifolia); *kabáb chiní* (Piper cubeba); *kálá-marich* (Piper nigrum); *puchá pát* (Pogostemon patchouli); *álu bokhárá* (Prunus Bokhariensis); *majuphul* (Quercus infectoria); *riwán chiní* (Rheum emodi); *manjit* (Rubia munjista); *rítá* (Sapindus emarginatus); *bhalatak* (Semecarpus anacardium); *chaul nadí* (Sphæranthus hirtus); *kuchilá* (Strychnos nox-vomica); *beheyrá* (Terminalia belerica); *palwál* (Trichosanthes dioica); *indrajab* (Wrightia anti-dysenterica).

MINERAL DRUGS.—*Phutkuri* (alum); *rasanján* (sulphuret of mercury); *sankhá* (arsenic); *kharimatí* (chalk); *tutá* (sulphate of copper); *hirá-khas* (sulphate of iron); *raskápur* (calomel); *murdan shánkar* (oxide of lead); *soráli* (nitrate of potash); *tabásír* (silicate of potash); *sajimatí* (carbonate of soda); *sohágá* (biborate of soda); *gandhak* (sulphur).

Only a few of the native practitioners (*kabirájs*) of this District treat disease with drugs. The greater majority of them are also *ojhás*, who profess to cure diseases by exorcism, or by means of the repetition of secret *mantrás* or sacred texts, which are handed down from father to son and from master to pupil. Different *mantrás* are used for various kinds of diseases and injuries.

GEOLOGY.—The soil of the hill tract in the vicinity of Baxá consists of vegetable mould, gneiss, clay, slate, gravel, boulders, conglomerate, soft sandstone, and a little lignite. A small number of the small streams issuing from the hills are impregnated with salts of lime and iron. The soil of the *tarái* along the foot of the hills consists of rich vegetable mould, gravel, clay, and sandstone. The

soil is
water
long distances. The western part of the District is geo
composed for the most part of alternating beds of sand, gravel and
boulders brought from the mountains, the soil being generally light
and gravelly. Boulders occur in the beds of the larger, and pebbles
in the beds of the smaller rivers. No rock is exposed below
the hills.

STATISTICAL ACCOUNT

OF

THE STATE OF KUCH BEHAR.

STATISTICAL ACCOUNT

OF THE

STATE OF KUCH BEHAR.[1]

THE STATE OF KUCH (COOCH) BEHAR, which forms, for certain administrative purposes, a portion of the Rájsháhí Kuch Behar Commissionership or Division, is situated between 25° 57′ 40″ and 26° 32′ 20″ north latitude, and 88° 47′ 40″ and 89° 54′ 35″ east longitude. It contains an area, as returned by the Surveyor-General in January 1876, of 1291·83 square miles; and a population, according to the Census of 1872, of 532,565 souls. The area adopted in the

[1] This Account of Kuch Behar State has been compiled chiefly from the following sources :—(1) The answers to my five series of questions, signed by Major W. H. J. Lance, and W. O. A. Beckett, C.S., Deputy-Commissioners, and dated 1871. (2) An Account of the Kuch Behar State, by Captain T. H. Lewin, Deputy-Commissioner and Superintendent (Kuch Behar 1876). (3) Paper on Kuch Behar, by Major F. Jenkins, Governor-General's Agent on the North-East Frontier, dated 1849, and published in Selections from the Records of Bengal Government, No. 5 (Calcutta 1851). (4) Report on the Bengal Census of 1872, by Mr. Beverley, C.S., with subsequent Local Compilation by Mr. Magrath, C.S. (5) Dr. Buchanan-Hamilton's MS. Statistical Survey of Rangpur District, conducted 1809-13. (6) Lectures on Kuch Behar, by Bábu Rám Chandra Ghosh, delivered at the Kuch Behar Hitaishiní Sabhá (Calcutta 1865). (7) *Descriptive Ethnology of Bengal*, by Colonel Dalton (Calcutta 1872). (8) Paper by Mr. B. H. Hodgson, H.E.I.C.S., on the Koch people, etc., published in the *Journal of the Asiatic Society of Bengal* for 1849, Part II. (9) *Ethnology of India*, by Dr. Latham (London 1859). (10) Special Report on the Land Tenures of Kuch Behar, by Mr. W. O. A. Beckett, C.S., Assistant-Commissioner in charge of the Settlement, dated December 1874. (11) Administrative and Financial Statistics, specially furnished by Mr. Metcalfe, C.S., Officiating Commissioner of the Kuch Behar Division, dated June 1873. (12) The monthly numbers of *The Statistical Reporter*. (13) The Bengal Administration Report for [illegible]-75. (14) Statement of Areas, Latitudes, Longitudes, etc., furnished by the [illegible]or-General of India.

Census Report is 1306 square miles; Captain Lewin also gives the area at 836,215 acres, or about 1306 square miles. The capital of the State, called Kuch Behar town, is situated in north latitude 26° 19′ 36″ and east longitude 89° 28′ 53″, between two branches of the Torshá river.

The name 'Kuch Behar' is derived from the Sanskrit *vihára* (Bengalí, *bihár*), meaning 'recreation,' especially applied to a Buddhist monastery. The latter is probably the historical basis of the name, as in the case of our Province of Behar. This name, however, is used only by the outside world. The appellation acceptable at the Court of the Rájá, who repudiates the theory of a Koch descent, is Níj Behar; the word *níj*, 'own, peculiar,' being applied to distinguish the country from Behar proper.

BOUNDARIES.—The State of Kuch Behar is bounded on the north by the Western Dwárs, which now (1875) form part of the District of Jalpáigurí; on the east by the Eastern Dwárs, which now form part of the Assam District of Goálpárá, and by the Districts of Goálpárá and Rangpur, the Godádhar and Sankos rivers forming the boundary-line for a considerable distance; on the south by Rangpur; and on the west by Jalpáigurí and Rangpur.

JURISDICTION.—The history of the Rájás of Kuch Behar will be given at length on a subsequent page. It is sufficient to state in this place that Kuch Behar is reckoned a feudatory State, under the control of the Lieutenant-Governor of Bengal in the political or foreign department. It is administered directly by its own hereditary Rájá, subject only to the payment of a fixed tribute of Rs. 67,700. 15 (£6770, 1s. 10½d.) into the treasury of Goálpárá. The treaty which defines the relations between the Rájá and the English Government is dated in 1773. Since that time English officers have frequently been appointed to reside at Kuch Behar, for the purpose of controlling or directing the administration of affairs. These officers have usually been styled Commissioners, and their authority has, in most cases, been coincident with long periods of minority in the ruling family. Since 1864, during the nonage of the present Rájá, the State has been under the direct manage ent of a Commissioner or Deputy-Commissioner. The Rájá i wner of considerable estates in the Districts of Jalpáigurí and pur, in respect of which he is merely an ordinary *zamíndár*. W s own frontier, the revenue, civil, and criminal areas of ju n are all conterminous.

GENERAL ASPECT.—Captain Lewin, in his Account of Kuch Behar State, writes as follows:—'Kuch Behar forms a large, well-cultivated plain, of a triangular shape, intersected by numerous rivers. Its most striking feature is the absolute dead level of the land. The greater portion of the State is fertile and well cultivated; tracts of jungle are met with only in the north-east corner, which abuts on the Province of Assam. The natural drainage of the country is from north-west to south-east. The soil is singularly uniform in character throughout, consisting of from six inches to two or three feet of light friable loam, superimposed on a deep bed of pure sand. Water is everywhere found within eight to twelve feet from the surface, at all seasons of the year.'

There are very few compact villages of the Bengalí type in the State, as the husbandmen generally live apart, each on his own little holding. The house of every *jotdár*, or petty landholder, is rendered conspicuous by being surrounded with bamboo clumps and plantain orchards.

Captain Lewin gives the following explanation to account for the physical conformation of the country:—'The theory which would seem to recommend itself as probable, is, that at some far distant period the ocean broke against the rocky slopes and spurs of the great Himálayan chain. Down from the great Central Asian plateaux poured innumerable streams, finding outlet at every gorge and mountain valley of the range; year by year these rivers brought down silt and vegetable *débris*, and year by year the great delta of Lower Bengal rose under the salt waters of the ocean. As the dry land emerged, so the confluent rivers cut themselves channels through the sand in the dry season; while their floods, rising in the rainy season, annually deposited successive superstrata of fertile silt upon the plains around. Emerging as they do, fresh, vigorous, and turbulent, from their mountain fastnesses, the hill streams which intersect Kuch Behar are intolerant of repression, and year by year change their beds, roaming right and left, cutting new courses or rushing back into old channels as accident may direct. No opposition to these fluvial vagaries can be offered by the land; owing its origin to the rivers, it is bent and moulded by them without obstruction. As a consequence of this, the country possesses little or no timber, for before a fine tree could grow to respectable dimensions, it would probably be swept away by some swerving yellow river flood.'

River System.—The following description of the rivers of Kuch Behar is mainly quoted from Captain Lewin's Account:—'The six principal rivers flowing through Kuch Behar State are,—(1) the Tístá; (2) the Singímárí; (3) the Torshá, which is also called the Dharlá or Dhollá; (4) the Káljání; (5) the Ráidhak; (6) the Godádhar. These six are all navigable by trading boats of one hundred *maunds*, or say four tons burden, throughout the year. There are, besides, twenty minor streams, which are used for boat traffic of the lesser sort during the rainy season only.'

The rivers of Kuch Behar all flow from north to south, some of them having a slight inclination towards the east. Without exception, they enter the State from the Western Dwárs (now part of Jalpáigurí District), and crossing Kuch Behar pass into the District of Rangpur, on their way to join the Brahmaputra. The river banks are generally abrupt, and the beds sandy. Towards the east of the State the banks are covered with dense jungle; but in other parts they are cultivated. None of the six principal rivers are fordable at any season of the year.

'The Tista.—The Sanskrit names for this river are Trishna and Trisrotá; the former implying 'thirst,' the latter, 'three springs.' The Kálí *Purána* gives the following account of its origin:—"The goddess Párvatí, wife of Siva, was fighting with an infidel (Osur), whose crime was that he would only worship her husband and not herself. The monster becoming thirsty during the combat, prayed to his patron deity for drink; and in consequence, Siva caused the river Tístá to flow from the breast of the goddess in three streams, and thus it has ever since continued to flow."

'The Tístá has its origin in Thibet. Its waters are singularly cold and limpid. It passes through Bhután, runs afterwards for a short distance through Jalpáigurí District, and enters the State of Kuch Behar at Bakshíganj. The direction of its course is south-easterly, and it merely cuts off the western portion of the State. It passes the following villages:—Bíbíganj, Mekhlíganj (the headquarters of a Subdivision and a local mart of some repute), and Chuklebárí; and finally makes its exit from Kuch Behar at Jhai Sinheswar.

'The channel of the Tístá is wide, being from six hundred to eight hundred yards across; but the actual volume of the water is comparatively small, except at the rainy season, when the floods come down from the hills with extraordinary strength and velocity. In the dry season, boats of not more than a hundred *maunds* burden

can ascend the Tístá; and even then its navigation is extremely difficult, owing to the rapidity of the current, the swiftness of its eddies, and the treacherous nature of its banks. In the rainy season, however, the largest country boats can safely navigate this river. The Tístá begins to swell in the spring, rising some two or three inches during April and May, which is probably due to the melting of the snow in the Himálayas.'

A full description of this river has been given in the Statistical Accounts of Rangpur and Jalpáigurí (vol. vii. pp. 164-165, and *ante*, pp. 226-228).

'THE SINGIMARI.—This is the longest and most perfect river in the State. The seat of Government was formerly situated on its banks, near Gosáinímarái (or Kamatápur), where the ruins of temples and fortresses still attest the bygone greatness of former days. It is navigable all the year round by boats of one hundred *maunds* burden as far as the Subdivisional Station of Mátábhángá, and even a little beyond, and in the rainy season is largely used by boats of all sizes.'

This river enters the State under the name of the Jáldhaká, at its extreme north-west corner, noted for Moranger-hát in Khití; it then flows in a south-easterly direction past the villages of Giládángá, Pánigrám, Dhaibángá, Khaterbárí, and Mátábhángá. In the middle of its course it is called the Mánáhí, and lower down, the Singímárí. It has several cross communications with the Dharlá or Torshá, and finally joins that river on the southern border of the State, near the trading villages of Durgápur and Gitáldaha. It has several large tributaries, among which may be mentioned the Mujnái, Satangá, Duduyá, Dolang, and Dálkhoá.

'THE DHARLA, DHALLA, OR TORSHA.—The name of this river is said to be derived from the Sanskrit *dhavla* (vulg. *dholla*), white; but the name is universally pronounced Dharlá. White, it may be observed, is by no means a suitable epithet, for the stream of the Dharlá, although clear in its upper course, becomes eventually very dirty. Its fountain-heads lie in the bosom of the hills, and it enters the State at a place called Lafabárí (in *táluk* Kámát Changrábáḍ). Its whole course is most involved and tortuous; and the old beds, affluents, and tributaries form a perfect network. The Torshá, the *Bara*, or great Torshá, the *Murá*, or dead Torshá, the *Chhotá*, or little Torshá, and the *Buri*, or old Torshá, are all connected with the main stream of the Dharlá.'

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A few miles after entering the State, the Dharlá passes into *parganá* Pátgrám, which forms a portion of Jalpáigurí District; it then re-enters Kuch Behar, and flows by the villages of Rathadángá and Atharabákí, and the Subdivisional Station of Dinhátá. The town of Kuch Behar lies between two channels of the Torshá. The main body of the Dharlá, after several cross communications, is joined by the Singímárí or Jáldhaká, near Durgápur and Gitáldaha; and the united stream, which retains the name of the Dharlá, presently passes into Rangpur District. A full description of this river, quoted from the MS. of Dr. Buchanan-Hamilton, has been given in the Statistical Account of Rangpur (vol. vii. pp. 166, 167).

'THE KALJANI leaves the hills of Bhután at the foot of the lower spurs, where is placed the British military post of Baxá. It cuts across the eastern angle of the State, and finally joins the river Sankos. The police outpost of Tufánganj is situated on its banks, at the spot where it is crossed by the Assam Immigration road, leading from Kuch Behar town to Dhubrí on the Brahmaputra. This river is used extensively to float down timber from the forests at the foot of the hills; the Government Forest Conservancy Department has a depôt at A[illegible] in *táluk* Kholla, where it enters Kuch Behar. Its tributary streams are the Chiká and Aláikumárí on the left, and the Bargharia and *Buri*, or old Torshá, on the right bank.'

The main stream passes the villages of Ambárí and Kaljání, and lower down, the trading marts of Balrámpur and Silkhurí; and finally leaves the State boundary at Jhaukutí, near which place it joins with the Ráidhak to form the Sankos.

THE RAIDHAK cuts across the eastern angle of Kuch Behar, in a winding course that is on the whole parallel to that of the Káljání, but farther to the east. It unites with that river to form the Sankos, which stream is again joined by the Godádhar some few miles above the spot where the united waters fall into the Brahmaputra.

'THE GODADHAR bounds Kuch Behar State on the east. The tract of country watered by this river is at present very sparsely inhabited, and consequently there is very little boat traffic; but the river is navigable at all seasons of the year for boats of one hundred *maunds*. The Godádhar ultimately joins the Sankos, and the united stream, after winding past the rocky point of Dhubrí, falls into the Brahmaputra by a passage which is somewhat dangerous for boats.'

CHANGES IN THE RIVER COURSES.—Alluvion and diluvion are constantly taking place throughout the State. There are no very remarkable instances of the accretion or dispersion of land, but *chars* or shifting sandbanks are to be found in all the larger rivers. The general result is thus described by Captain Lewin :—

'Although there are no lakes or artificial water-courses in Kuch Behar, yet the country abounds in what might well be mistaken for ancient water-works—the result of the changing action of the rivers already described. Every small stream seems to consider itself at liberty to choose a fresh course, if necessary, even year by year. The consequence is, that throughout the State may be found old beds of rivers, and water-courses, now abandoned by the flowing stream, full of dead water and dank grasses, in which the water-fowl delight, but which do not add to the healthiness of the country for human habitation.'

RIVER TRAFFIC, ETC.—The State contains no river-side town or large village inhabited by a community who gain their livelihood by river traffic. Some Statistics on this subject will be given subsequently (pp. 399–401), under the heading 'Commerce and Trade.' The following paragraph is quoted from *The Statistical Reporter* for July 1876 :—'From Kuch Behar the export of jute and tobacco is large, but there is very little trade on the rivers except during the rains. At other seasons the smaller streams are dry; and the river mouths at Bagwá and Dudhkumár, by which the Dharlá and Sankos respectively enter the Brahmaputra, have such a small depth of water, that boats of more than 100 or 200 *maunds* burthen require to be lightened by the transhipment of their cargoes into smaller boats, till th[illegible]als are passed. In the rains, these rivers can be traversed b[illegible] *maunds*. None of the marts on the Dharlá are of a[illegible]de is considerable in the aggregate. On [illegible]astern limit of Rangpur District, [illegible]ensive trade with [illegible] to turn machin- [illegible]y rapid to be so [illegible]bout 2 per cent. [illegible]navigation, and [illegible]ed from *jalkar* [illegible]r of the rivers [illegible]ave been em-

banked, with a view to the extension of cultivation; but certain small marshes are drained by the cultivators, and planted with rice. These reclamations are covered with water each rainy season, and require annually to be drained afresh. The marshes are not otherwise utilized for cultivation. Cane is generally procured from the jungles in the eastern part of the State, and the very long-stemmed rice of Eastern Bengal is nowhere grown.

The general line of drainage is from north-west to south-east, following the course of the rivers, into which the surface water, for the most part, directly finds its way.

FERÆ NATURÆ.—Tigers, leopards, wild buffaloes, rhinoceros, bears, and other wild animals are to be met with in many parts of Kuch Behar. Deer of different descriptions are also numerous. Small game is scarce, consisting chiefly of a few partridges, wild duck, etc.

POPULATION.—No attempt at an enumeration of the inhabitants of Kuch Behar was made before the Census of 1872. As in the other Districts of what then formed the Kuch Behar Division, it was not attempted to take a simultaneous Census of the people. 'The Census of Kuch Behar was effected by the Settlement Officers. It commenced in November 1871, and was completed in February 1872.' The elaborate classification adopted for the Regulation Districts of Bengal was not extended to the State of Kuch Behar; and, therefore, the Census returns appear, in many respects, to be imperfect. The results disclosed a total population of 532,565 persons, living in 1199 villages or townships, and in 81,820 houses. The area of the State was estimated at 1,307 miles, which shows an average density of population of 407 p ns per square mile. The average number of persons per house It has already been remarked (*ante*, p. 333) r sense of the word, hardly exist in columns, therefor of villages, etc., of no value for out of regard to The table on etc. of each p partly from th quent special

ABSTRACT OF AREA, POPULATION, ETC. OF EACH POLICE CIRCLE (THANA) IN KUCH BEHAR STATE, 1872.

Thánd or Police Station.	Area in Square Miles.	Number of *Mauzás*, Villages, or Townships.	Number of Houses.	Total Population.	Averages calculated from preceding columns.				
					Persons per Sq. Mile.	Villages, *Mauzás*, or Townships per Sq. Mile	Persons per Village, *Mauzá*, or Township.	Houses per Sq. Mile.	Persons per House.
Mekhlíganj,	188	211	12,139	75,884	452	1·25	359	72	6·3
Mátábhángá,	227	185	11,842	82,303	363	0·81	445	52	7·0
Lál Bázár,	176	130	11,262	73,381	417	0·74	564	64	6·5
Dinhátá,	206	248	15,614	118,032	573	1·20	476	76	7·6
Kuch Behar,	309	274	21,965	125,060	405	0·88	456	71	5·7
Tufánganj,	189	116	7,942	50,868	269	0·61	438	42	6·4
Detached portions in the Districts of Rangpur,	32	35	1,056	7,037	220	1·09	201	33	6·5
TOTAL,	1307	1199	81,820	532,565	407	0·91	444	63	6·5

Population according to Sex and Age.—The total population of Kuch Behar State amounted, in 1872, to 532,565 persons, of whom 278,585 were males, and 253,980 were females. The proportion of males in the total population was 52·3 per cent. The males under 12 numbered 102,189, or 19·2 of the total population; and the females under 12, 75,367, or 14·1 per cent. of the population; total number of children under 12, 177,556, or 33·3 per cent. of the population.

The details of the occupations of the people, given in the special Census Compilation, are omitted, as they do not stand the test of statistical criticism.

Ethnical Division of the People.—The population of Kuch Behar is of a mixed origin. The Rájbansís, or Kochs, undoubtedly predominate over all the other tribes; but both these names are vaguely used, and it is not easy to assign to them their proper ethnological significance. According to the Census Compilation, the aboriginal tribes are very weakly represented in the State, numbering only 865 adult males. The semi-Hinduized aboriginals, on the other hand, are extremely numerous; with the addition of the Muhammadans, who are not ethnologically to be distinguished from them, they make up 93·64 per cent. of the total population. It [illegible] said that the sanctity of the marriage tie is not [illegible] completed in the State, and that illegitimate outcasts fo[illegible] [illegible]trictly respected formed, an unusually large proportion of [illegible]rm, and always have gration, also, has had an effect [illegible]nsus [illegible]he inhabitants. Immi- population. Members of the le[illegible] [illegible]in confusing the purity of the jungle tribes from the *tarái* [illegible]ss degraded castes of Bengal, and though not numerously; and from Assam, are to be found, sources is thought to be and immigration from both these two District there is absol[illegible]on the increase. Of emigration from the

Mr. C. F. Magrately none.

classifies the adult's Census Compilation for Kuch Behar thus list of Hindu an[illegible]ales, according to ethnological grounds. The subsequent page[illegible]emi-Hinduized castes will be reproduced on a here, accordingut arranged in a different order from that given esteem :— [illegible]o the rank which they hold in local public

Name of Nationality, Tribe, or Caste.	Number of Adult Males
I.—NON-ASIATICS.	
Europeans,	5
Total of Non-Asiatics,	5
III.—ASIATICS.	
A.—Other than Natives of India and British Burmah.	
Chinese,	1
Nepálís { Gurkhá,	10
Nepálís { Thápá,	2
Total,	13
B.—Natives of India and British Burmah.	
1. *Aboriginal Tribes.*	
Dhángar,	14
Gáro,	226
Káchárí,	2
Mech,	148
Morang,	412
Nat,	1
Telenga,	62
Total,	865
2. *Semi-Hinduized Aboriginals.*	
Bágdí,	13
Bediyá,	249
Chámár,	89
Chandál,	2,457
Dom,	196
Hárí,	586
Khyen,	1,901
Mihtár,	101
Bhuimálí,	302
Rájbansí,	111,125
Shikárí,	76
Total,	117,095
3. *Hindus.*	
(i.) Superior Castes.	
Bráhman,	1,164
Chhettrí or Rájput,	299
Total,	1,463
(ii.) Intermediate Castes.	
Baidyá,	38
Káyasth,	810
Total,	848
(iii.) Trading Castes.	
Márwárí,	180
Banik,	78
Khatrí,	3
Oswál,	3
Total,	264
(iv.) Pastoral Castes.	
Goálá,	352
Garerí,	30
Total,	382
(v.) Agricultural Castes.	
Báruí,	49
Koerí,	1,674
Kaibartta,	852
Kurmí,	75
Kolitá,	6
Málí,	1
Total,	2,657
(vi.) Castes engaged chiefly in Personal Service.	
Dháwá,	32
Dhánuk,	1
Dhobí,	93
Káhár,	188
Nápit,	1,029
Total,	1,343
(vii.) Artisan Castes.	
Kámár (blacksmith),	146
Kumár (potter),	315
Swarnakar (goldsmith),	46
Sutradhar (carpenter),	3
Sunrí (distiller),	228
Telí (oilman),	78
Total,	816

Name of Nationality, Tribe, or Caste.	Number of Adult Males	Name of Nationality, Tribe, or Caste.	Number of Adult Males
(viii.) Weaver Castes.		(xi.) Persons of Unknown or Unspecified Castes,	52
Jogí, ...	769		
Tánti, ...	922	Grand Total of Hindus,	9,624
Total, .	1,691	4. *Persons of Hindu Origin not recognising Caste.*	
(ix.) Labouring Castes.		Vaishnav, . . .	708
Nuniyá, ...	7	5. *Muhammadans.*	
		Unspecified, . . .	48,086
(x.) Boating and Fishing Castes.		Total of Natives of India, . . .	176,378
Mánjhí, ...	88		
Náluá, ...	13	Total of Asiatics, .	176,391
Total, .	101	Grand Total, .	176,396

The Aboriginal Tribes number only 865 adult males. Of these, 226 are Gáros, from the Gáro Hills of Assam, who are largely occupied in supplying wood from the jungles. The Kácháris (2), the Mechs (148), and the Morangs (412), numbering altogether 562 families, may be considered ethnologically as members of one and the same great race, which is scattered along the Assam valley, and extends to the *tarái* beyond Dárjíling. This primitive race is known by a variety of appellations. Under the name of Kácháris, they are said to have at one time held dominion in what was afterwards the Hindu kingdom of Kámrúp. They have been described at length, as Mech, Bodo, and Dhimál, in the Statistical Account of Dárjíling (*ante*, pp. 66-80). The Mechs and Morangs are agriculturists; but some of the former serve as palanquin bearers, and the latter as coolies, chiefly in the service of the Rájá. Telenga, numbering 62 families, are described by Dr. Buchanan-Hamilton as a wandering tribe similar to the Bediyás. They sell fish, and play on the native drum.

Hindu Castes.—The following is a list of fifty-two castes met with in Kuch Behar State, arranged as far as possible in the order according to which they rank in local esteem, together with their occupations, etc. The figures of the adult males of each caste are taken from the Census. (1) Bráhman; 1164 in number,

who are all immigrants from other Districts of Bengal. They act as priests, spiritual guides, clerks, etc. (2) Rájput or Kshattriya; 299 in number; also immigrants from other Districts. They are chiefly employed in personal or military service. The military force of the Rájá numbers about 80 men. (3) Baidyá; 38 in number, who are by hereditary occupation the physicians of Bengal, but the majority of them now find employment in any honourable pursuit. (4) Márwárí, 180 in number; (5) Khatrí, 3 in number; and (6) Oswál, also 3 in number, are all three classes of enterprising traders and bankers from the North-West. (7) Káyasth; 810 in number; the writer caste of Bengal, who have immigrated into Kuch Behar from the southern Districts. The Census Report probably includes with the Káyasths proper, the Kolitá Káyasths, who are immigrants from Assam. This tribe has been described in the Statistical Account of Rangpur (vol. vii. p. 215), where it is stated, on the authority of Dr. Buchanan-Hamilton, that they 'conceal their descent from the Kolitás with as much care as the Rájá of Kuch Behar does his origin from a Koch.' In this State they are employed as clerks, domestic servants, and braziers; and, though few in number, they are as much respected as the Bengalí Káyasths. Among the agricultural castes the Census Compilation includes (8) Kolitá, numbering 6; but neither in occupation nor in number can these be identified with the Kolitá Káyasths just mentioned. This caste will be further described in the Statistical Account of the Assam District of Kámrúp, where they form nearly one-fifth of the total population. (9) Banik or Gandhabaniá; 78 in number. This is the trading caste of Bengal, who are chiefly engaged as shopkeepers in this State. (10) Nápit; barbers; 1029 in number. (11) Kumár; potters and diggers of wells; 315 in number. (12) Telí or Tilí; oil-pressers and oil-sellers by hereditary occupation; 78 in number. (13) Kamár or Karmakar; blacksmiths; 146 in number. (14) Báruí; growers and sellers of *pán* or betel-leaf; 49 in number. (15) Málí; gardener and flower seller; 1 in number. (16) Kaibartta; fishermen and agriculturists; 852. in number. This caste has been fully described in the Statistical Accounts of Húglí and Midnapur (vol. iii. pp. 54, 55, and 288); and its position in this part of the country has been commented upon in the Account of Rangpur District (vol. vii. pp. 216, 217). (17) Koerí; a cultivating caste; 1674 in number. The Koerís are properly a Behar caste of market-gardeners, and their com-

paratively large number in this part of the country is probably to be explained by some error in the Census Returns. The Census Report (p. 186) suggests that there may have been a confusion between Koerí and Kurí—another name for Madak. (18) Garerí; an up-country pastoral caste; 30 in number. (19) Goálá; milk-men and cowherds, the pastoral caste of Lower Bengal; 352 in number. (20) Kurmí; a respectable cultivating caste, immigrants from the neighbourhood of Patná; 75 in number. (21) Tántí; weavers; 922 in number. (22) Sutradhar or Chhutar; carpenters; 3 in number. (23) Vaishnav or Baisnab; 708 in number. This is not properly a caste, but a religious sect, composed of the followers of Chaitanya, a religious reformer of the fifteenth century, who taught the renunciation of caste, and the equality of all mankind before their Maker. A full description of this sect is given in the Statistical Account of the 24 Parganás (vol. i. pp. 65-67, and 72, 73). (24) Swarnakar; goldsmiths and jewellers; 46 in number. (25) Khyen; 1901 in number; the third most numerous caste in the State. This is a tribe peculiar to this part of the country, being especially numerous in Rangpur. There appears to be some connection between them and the Rájbansís, but the Khyens are the more respected of the two, and in Kuch Behar State are largely employed as clerks; the remainder are domestic servants and agriculturists. Dr. Buchanan-Hamilton observes, in reference to Rangpur, that 'the Khyens are the only Kámrúpí tribe that the Bráhmans of Bengal will admit to be pure Súdras, which clearly shows the great power once held by the Khyen princes.' The Census Report states (p. 184) that 'the Khyens seem to have been one of the many tribes that overran Kámrúp, after the extinction of the Pál dynasty. Rájá Niládwáj (the founder of Kamatápur) seems to have belonged to this tribe; and it is said that, in consequence of his introducing a colony of Mithilá Bráhmans, the tribe was raised to the dignity of pure Hindus. Mr. Westmacott (the Collector of Dinájpur) states that in his District the Khyens are oil-pressers and cultivators; and in the returns from the Dwárs, the terms Khyen and Telí are used synonymously. Mr. Westmacott adds, however, that the Bráhmans will not take water from the hands of the oil-pressing Khyens, a mark of inferiority which attaches equally to all Telís.' (26) Rájbansí or Koch; 111,125 in number, or 63 per cent. of the total population of the State. A full description of this tribe, which is dominant in the State of Kuch Behar, and has bestowed on it

both its English name and its ruling family, will be given subsequently (*post*, pp. 346–358). It is sufficient to state here that the great bulk of the Rájbansís are cultivators of the soil; and that they are not treated with so much respect as might be anticipated from the historical origin of the Rájá. There is said to be included among them a considerable number of the illegitimate descendants of the higher castes. (27) Koch; not separately returned in the Census Report, but manifestly included among the Rájbansís. The Deputy-Commissioner, however, distinguishes them; and states that they are few in number, and mostly employed as palanquin bearers. They may perhaps be identified with the Páni-Koch, or primitive Kochs, who will be described on a subsequent page. (28) Sunrí or Surí; distillers and sellers of spirits by hereditary occupation, but now also shopkeepers; 228 in number. (29) Dhobí; washermen; 93 in number. (30) Káhár; palanquin bearers and domestic servants; 188 in number. (31) Dhánuk; 1 in number; a labouring caste from Behar. (32) Dháwá; day-labourers and domestic servants; 32 in number. (33) Jogí or Jugí; 769 in number. They are included in the Census Report among the weaving castes; but the Deputy-Commissioner states that, in Kuch Behar, they confine themselves to what is elsewhere their subsidiary occupation—burning lime, and manufacturing shell bracelets for women. Many of them are also agriculturists. (34) Chandál; 2457 in number, being the most numerous caste in the State after the Rájbansís. They are boatmen, fishermen, and cultivators. (35) Mánjhí, 88 in number, and (36) Náluá, 13 in number, are returned in the Census Report as the only two fishing and boating castes in the State. The Deputy-Commissioner, however, adds (37) Dáví, (38) Garol, and (39) Bagat, as also being boatmen and fishermen. These castes are not separately mentioned in the Census Report, but the total of all three is very small. The Dávís are palanquin bearers as well as fishermen. (40) Nuniyá; 7 in number. This is properly a Behar caste, who manufacture saltpetre. (41) Chámár or Muchí; shoemakers and leather dealers; 89 in number. (42) Shikárí; huntsmen; 76 in number. (43) Bájárí; not separately returned in the Census Report, but described by the Deputy-Commissioner as sellers of fish and agriculturists. (44) Bágdí; cultivators, fishermen, and day-labourers; 13 in number. (45) Dom; basket-makers and scavengers; 196 in number. (46) Hárí; swineherds, sweepers, and players on the native drum; 586

in number. (47) Mihtar; sweepers and scavengers; 101 in number. (48) Bhuimálí; usually regarded as a branch of the foregoing caste; 302 in number. The Deputy-Commissioner mentions a third caste, (49) Jalladh, who follow the same occupation as the two preceding castes, with whose numbers they are, doubtless, included in the Census Report. (50) Bediyá; 249 in number. A wandering, gipsy-like tribe, who earn their livelihood by juggling, snaring birds, etc.; they also skin animals, and play on the native drum. (51) Jáldá and (52) Máljadá are mentioned by the Deputy-Commissioner as two distinct castes, both of which are composed of the descendants of illegitimate unions. Neither of them are mentioned in the Census Report. The distinction between the two is that the Máljadás are the children of prostitutes only, and follow the trade of goldsmiths; the Jáldás are the fruit of any illicit connection between low-caste people generally, and are, for the most part, agriculturists.

KOCH OR RAJBANSI.—As the State of Kuch Behar is generally recognised as the headquarters of the tribe who are called indiscriminately Koch, Rájbansí, and Palí, I have thought it convenient to reserve to this place a full description of this widely spread and once powerful race. My materials are chiefly taken from Dr. Buchanan-Hamilton's MS. Account of Rangpur, Mr. B. H. Hodgson's 'Essay on the Koch, Bodo, and Dhimál Tribes' (*Journal of the Asiatic Society of Bengal*, 1849, part ii.), and Colonel Dalton's *Descriptive Ethnology of Bengal* (Calcutta 1872).

Dr. Buchanan-Hamilton, in the first decade of this century, estimated the number of Kochs and Rájbansís in Rangpur at 18 per cent. of the total population of the District. This estimate was intended to exclude those of the same nationality who had embraced the Musalmán faith, and was probably not very wide of the mark. Mr. Hodgson, in 1847, put the total number, including the Muhammadans, at between 800,000 and 1,250,000 souls. According to the Census Report, the total number of persons in Bengal, Behar, and Assam, who are returned as either Kochs, Rájbansís, or Palís, amounts to a little more than one and a half millions. Of these, about 49 per cent. are called Rájbansís, 26 per cent. are Kochs, and the remainder Palís. In geographical distribution, they are to be almost entirely found in the strip of country that extends from Maldah District on the borders of Purniah, in the Province of Behar, on the south-west, to Goálpárá District, in the Assam valley of the

Brahmaputra, on the north-west. It is possible that not a few of the million and a half persons above mentioned do not belong to the same common stock. Indeed, it is almost certain that some of the low fishing castes of Eastern Bengal have been included in the total, as they preferred to adopt, instead of their proper name of Tior, the sounding appellation of Rájbansí. But the diminution that ought to be made on this account would not affect the general calculation. On the other hand, in order to discover the real number of those who have a right to bear the name of Koch, an indefinite and unascertainable figure should be added to the million and a half just mentioned, to represent that large fraction of the race who have adopted the faith of Islám, and are now hopelessly confused with the general Muhammadan population of the north-east of Bengal. The full number of those who ought to be ethnologically connected together as Kochs, cannot, therefore, be regarded as under two millions. Out of the total ascertained by the Census, no less than 434,000, mostly under the name of Palí, are to be found in Dinájpur, where they form 60 per cent. of the entire Hindu population of the District. In Rangpur they number 407,000, almost all under the name of Rájbansí, forming 47 per cent. of the Hindu population. In Jalpáigurí they number 137,000, all Rájbansís, or 75 per cent. of the Hindu population. In the State of Kuch Behar itself, as has been stated on a previous page, the Rájbansís are returned as numbering 111,125 adult males, or 88 per cent. of the total Hindu adult males in the State. In the Assam District of Goálpárá there are 120,000 Kochs, or 38 per cent. of the Hindu population. It appears, therefore, that in the Districts where they are most numerous, the Kochs amount, on an average, to about one-half of the Hindu population; and if those of the same race among the Muhammadans could be discovered, there is no reason to suppose that this proportion would be materially altered. The name Palí, which is interpreted as meaning 'wanderers,' and thus connected with one of the most deeply rooted traditions of their race, is almost confined to the southern Districts of Maldah and Dinájpur. Even there it is not used by the Palís themselves, who prefer the word Rájbansí, but it is applied to them contemptuously by their less impure Hindu neighbours. In Rangpur, Jalpáigurí, and Kuch Behar State, where the race is nearer to its home, and more closely connected with its historic predominance, the name of Rájbansí, which means literally

'of royal race,' is adopted by the cultivators and respectable classes; that of Koch being restricted to labourers, and especially to palanquin bearers. In Assam, on the other hand, the name of Koch is alone found, and is proudly borne even by some who have no just claim to it. Rájbansí is an epithet properly applied to persons of the highest caste, such as Rájputs, and has evidently been adopted by the Kochs to corroborate their cherished tradition, that they represent the remains of the old Kshattriya caste. The word Koch, however, though now despised, possesses the most authentic history of the three. It is merely the Prakrit form of the Sanskrit word Kavách, which is applied in the Yogini Tantra to the Mlecchas or aborigines of this very region; and, according to Mr. Hodgson, 'it is still adopted by the Kochs themselves, wherever they have not been perplexed with Bráhmanical devices.'

Concerning the diversity of names under which the Kochs are known, Dr. Buchanan-Hamilton thus writes:—'The Kochs have assumed various designations and distinctions, in accordance with the different degrees of compliance they have yielded to the Hindu law, and the different degrees of constraint upon their appetite to which they have consented to submit. Where there are many other Hindus, and where the Hindu rules of purity have gained a complete ascendancy, the highest of this tribe are exclusively called Rájbansí, and conform in all things to the Hindu doctrine, at least as modified in severity to suit the temperament of Kámrúp. In such parts, only persons who degrade themselves by carrying palanquins are termed Koch; while those who are still further contaminated by eating pork and fowls, and catching fish, are styled Dávi and Garol. [These two names have already been mentioned in the list of Castes, Nos. 37 and 38, where they have been described as boatmen and fishermen.] In other parts of the country, where the Hindu doctrine has less prevailed, all are indiscriminately called Rájbansí. Thus, in the territory of Khuntághát, on the Bísní river, which belongs to one of their very highest chiefs, almost every cultivator is a Rájbansí; but they are divided into two classes, the Bhokot, or worshipper of Krishna, and the Gorámí, who eat pork and other abominable food, and openly abandon themselves to strong liquors. These latter have precisely the same customs as the Dávi in the vicinity of Rangpur and the Palís of Dinájpur, probably retaining what was in use among the whole tribe before the days of Visu Sinh [the first of the Kuch Behar Rájás]. These

Gorámís worship chiefly Kámákhyá, the ancient deity of the tribe. In other parts, again, such as in Assam, Nepál, and Bhután, the whole tribe, except the Kolitás, is called Koch, from the Durang Rájá down to the lowest peasant.' If the nomenclature of the Census Report can be trusted, the distinctions of name remain substantially to the present day as localized by Dr. B. Hamilton. In Purniah, Rájbansí is the prominent word, but Palí is also very common; in Maldah, the numbers are almost equally divided between Palís and Rájbansís; while in Dinájpur, the Palís are almost as four to one. In Rangpur, the name of Rájbansí is almost universal, though there are a few Kochs found, and the title of Palí disappears. The same may be said of Jalpáigurí, Kuch Behar State, and Dárjíling; while in all the Assam Districts no other name is used but Koch, who form exactly one-half of the semi-Hinduized population of that Province.

Concerning the ethnological affinities of the Kochs there is some difference of opinion. The common opinion, supported by the authority of Mr. Hodgson and Dr. Latham, is that they are connected with the neighbouring tribes of Mechs and Káchárís, and are of Mongolian or trans-Himálayan extraction. Dr. Buchanan-Hamilton, who had personal knowledge of a small tribe called Páni-Koch, whom he regarded as the primitive representatives of the race, states that the language had no affinity with Bengalí, while it was equally distinct from that used by the Gáros. It does not appear that the Páni-Kochs have since been identified, though Dr. B. Hamilton described them as being 'still [1809] thinly scattered over all the north-eastern parts of Rangpur [which then included the present Districts of Jalpáigurí and Goálpárá], Assam, and the lower parts of Bhután.' He states that 'they assumed the name of Páni-Koch in order to distinguish themselves from the Gáros, with whom they were often confounded; but that in language and religion they bear a considerable resemblance to the Rábhás,' who are universally admitted to be a branch of the great Mech family. It is noteworthy that Dr. B. Hamilton entirely passes over the Bodos or Dhimáls, who are the chief Mech inhabitants of this part of the country, and who have been described at length, in the words of Mr. Hodgson, in the Statistical Account of Dárjíling. It is possible, therefore, that the Páni-Kochs of Dr. B. Hamilton are identical with the Mechs of later observers; though it must be confessed that the description given of their religion

and manners by Dr. B. Hamilton differs in many material points from that given of the Bodos and Dhimáls by Mr. Hodgson. For example, they are described, in Dr. B. Hamilton's MS., as *burning* their dead, which Colonel Dalton (p. 91), by an evident misprint, turns into *burying;* whereas the Mechs, like most other primitive tribes, adopt the practice of interment. The Gáros, however, burn. Unfortunately, there is no evidence of a linguistic character obtainable, which might help us to determine their ethnological affinities. Mr. Hodgson, who has published valuable vocabularies of the dialects used by the Bodos and Dhimáls, *i.e.* the Mechs, 'failed altogether to get at the unconverted Kochs,' *i.e.* the Páni-Koch of Dr. Hamilton. The vocabulary of the Kochs which he gives is that of 'the converted Kochs;' and, according to Colonel Dalton, 'it is all Bengalí, Hindí, or Assamese, and does not contain a word or a grammatical construction that would affiliate it with any of the north-eastern tribes. Dr. Latham, in his *Ethnology of India*, gives a list of fifteen words as Koch (which are extracted from Mr. Hodgson's copious vocabulary). Three of these are Assamese, two are Bengalí, and the remainder are common to both languages. The first word on the list is remarkable; *beta-choá* being given for "man." I [Colonel Dalton] have never heard this expression in Assam or Bengal, but it is very common in Chutiá Nágpur, where *beta-choá* means a boy, and *beti-choá* means a girl; and it is also used by the Uriyás and the Gonds.'

As philological evidence fails us in attempting to trace the origin and connection of the Kochs, we are compelled to betake ourselves to physical characteristics, 'which are, after all,' in the words of Colonel Dalton, 'the most indelible indications of race.' It is, therefore, much to be regretted, that on this point there is an irreconcilable conflict of evidence between authorities of equal weight. Dr. Buchanan-Hamilton is entirely silent on this branch of the subject; but he evidently considered the Páni-Koch to be the primitive type, and the great mass to be of a somewhat mixed descent. Mr. Hodgson, who is followed by Dr. Latham, identifies the Kochs, the Mechs, the Káchárís, etc., as all being members of one great Mongolian race, of Turanian or non-Aryan origin; and both these writers express the opinion that the Kochs or Rájbansís are merely the most Hinduized form of the common stock. The identification is based upon Mr. Hodgson's personal knowledge of this part of the country. 'I can attest,' he says, 'the entire con-

formity of the physiognomy of all, and of the creed and customs of this remnant [the Koch] with those of other aborigines around them.' 'The physical type of the Koch, as contrasted with that of the Hindu, is palpable, but not so as compared with that of the Bodo and Dhimál. In other words, the physical type of all the Turanians, on this frontier at least, tends to oneness. In the Turanian style of features and form, as opposed to the Aryan, there is less height, less symmetry, more dumpiness and flesh; a somewhat lozenge contour of the face, caused by the large cheek-bones; less perpendicularity in the features to the front, occasioned not so much by defect of forehead or chin, as by excess of jaws and mouth; a larger proportion of face to head, and less roundness of the latter; a broader, flatter face, with features less symmetrical, but, perhaps, more expressive at least of individuality; a shorter, wider nose, often clubbed at the end and furnished with round nostrils; eyes smaller, and less fully opened, and less evenly crossing the face by their line of aperture; ears larger, lips thicker, beard deficient, colour brunet, as with the Aryans, but darker on the whole, and, as with them, very various. Such is the general description of the Indian Turanians. With regard to the particular races among them, it can only be safely said that the mountaineers exhibit the Mongolian sub-type more distinctly than the lowlanders; and that they have, in general, a paler, yellower hue than the latter, among whom there are some individuals, at least, nearly as black as negroes. The Koch, Bodo, and Dhimál are as fair as their Bengalí neighbours on one side, and scarcely darker, especially the Bodos, than the mountaineers above them on the other side. These last they resemble in the style of their features and form, only with all the physiognomical characteristics softened down, and the frame less muscular and massive.' Dr. Latham adopts the theory of Mr. Hodgson in its entirety. He treats of the Kochs, Bodos, Dhimáls, Gáros, etc, in the same chapter as part of one family, and hazards the conjecture that Koch is the name by which all these tribes were originally called.

Colonel Dalton, however, whose individual experience extends to the tribes of the north-east frontier as well as to the hill-men of Chutiá Nágpur, draws a marked distinction between the Kochs and their aboriginal neighbours, based mainly upon colour. The Mechs, being yellow, are consequently referred by Colonel Dalton to the Mongolian or Indo-Chinese stock, of which he regards the Gáros as

the most pure type. The Kochs are black, or very dark, and are to be connected with the Dravidian, or southern and central Indian branch of the Turanians. The Páni-Koch of Dr. Buchanan-Hamilton are distinguished from the Kochs proper by Colonel Dalton. 'They are, undoubtedly, of the same lineage as the great Mech family, and closely connected with the Gáros; but it is a mistake to regard them as the primitive type of the people called Koch. They probably took the name of Páni-Koch to conciliate the ruling power, at the time when the real Koch were dominant, without having any real claim to be members of the family.' In support of his theory, which is in direct antagonism to the commonly received opinion, Colonel Dalton adduces the following evidence:—'The Rájbansí are all very dark; and as their cognates [immediate neighbours?] the Kachárís, Mechs, and Gáros are yellow or light brown, and their northern, eastern, and western neighbours are as fair or fairer, it must be from contact with the people of the south that they get their black skins. The Koch, on the other hand, are thus described by a medical officer on the spot:—"Flat face, giving rather an appearance of squareness; eyes black and oblique; hair black and straight, in some curling; nose flat and short; cheek-bones prominent; beard and whisker *rather* deficient [on this Colonel Dalton remarks that in the Káchárís, etc. these adjuncts are *very* deficient]; colour of skin, *in most instances*, black; side of head rather flattened; forehead retreating." Dr. Campbell, in writing of the Mechs, speaks of the Kochs as having more of a Hindu physiognomy.' 'On referring to my own notes,' continues Colonel Dalton, 'written in 1847, I find the following: "It is remarkable that, whilst the facial line of the Gáros is nearly vertical, in some of the Koch tribes I have observed it exceedingly angular, though with as little prominence of nose as in the Gáro tribes. The upper line along the forehead continuing in the Koch tribes in one direction to the extremity of the upper lip, then suddenly receding to the bottom of the jaw-bone in the most unintellectual form imaginable." I remarked of the Gáros that their mouths, like their noses, were compressed, whilst the Koch displayed the thick protuberant lips and maxillaries of the negro. Of the Muhammadan Koch of Purniah District, the Magistrate, Mr. Beames, gives the following description:—"The peculiar dialect, the stunted figures, sharp, wizened features, high cheek-bones, tufted beard, etc., mark them as a peculiar race." Sir George Campbell would decidedly place the Kochs among his negritoes. [As a matter

of fact, Sir George Campbell says, "Their original character cannot be distinguished with certainty;" and he is disposed, in variance with Colonel Dalton's later published view, to consider the Gáros as the only one among the tribes of the north-eastern hills who are not Indo-Chinese in origin, but aborigines from Central India.] I think we must allow that colour and physical characteristics clearly separate them from the Bodo group, though the people called Paní-Koch doubtless belong to that family.' Colonel Dalton thus sums up his theory, which has been endorsed by Mr. Beverley in the Census Report of 1872:—'The Koch people appear to me to be entirely out of their element among the Lohitic tribes. From all that I have been able to glean regarding them, it seems more likely that they originally belonged to the dark people whom they resemble, who were driven out of the Gangetic provinces when the kingdoms of Mithila and Magadha were established by the lunar and solar races, rather than to the northern Turanian or Indo-Chinese family, to which they are so unlike. In short, I consider that they belong to the Dravidian stock, and are probably a branch of the great Bhuiyá family; and we thus obtain a clue to the traditions of the Bhárá Bhuiyás, to whose period of rule in Assam so many great works are ascribed.'

Whichever of these rival theories be adopted concerning the ethnological affinities of the Kochs, there can be little doubt that the people commonly known as Koch, Rájbansí, and Palí are a very mixed race. One of their earliest traditions is that Hájo, the founder of the Kuch Behar dynasty, gave his daughter and heiress in marriage to a Mech chief; though this connection is now indignantly repudiated by the ruling family. Dr. Buchanan-Hamilton, also, states that 'there is reason to suppose that, until very lately, the different tribes of Kámrúp permitted intermarriage.' He expresses as his own opinion, that 'all the Kochs are sprung from the same stock, and that most of the Rájbansís are Kochs; but many of the Rájbansís belong to different tribes, who have abandoned their impure practices, and have been admitted to communion.' It is further worthy of notice in this connection that the Deputy-Commissioner of Kuch Behar reports, apparently as the prevalent impression amongst the immigrant Bengalís, that 'the present inhabitants of Kuch Behar State do not belong to any particular race. The Mechs, who inhabit the Bhután Dwárs, coming into contact with the immigrants from the south, intermarriages have

taken place, and their descendants are the modern Kuch Beharís. Laws of marriage are here very loosely regarded, and this circumstance has contributed to the growth of a mixed population. Illegitimate children are not looked down upon as out-castes, but become Khyens or Rájbansís. The father may be a Bráhman and the son a Rájbansí, and still the former does not lose his caste.' On the whole, the opinion of Dr. Buchanan-Hamilton, the most accurate observer who has ever inquired into the whole extent of the region inhabited by this people, seems to be the most acceptable. He states, in his MS. Account of Dinájpur, that 'the three tribes of Rájbansís, Koch, and Palí, which may altogether number about 290,000 souls in this District, consider themselves distinct; but it is contended by many that they originally formed one people, who have now separated, because some of them have adopted, more than others, those manners which the Hindus consider pure. To me they certainly appear to have had a common origin; and their features mark them clearly to be a different race from other Hindus, and as belonging to the broad, flat-faced people who occupy the eastern portions of Asia. The Rájbansís seem to be merely the families of the Koch which are related [or claim to be related] to their princes, such as the Rájá of [Kuch] Behar, Bijní, and Darrang, whose history is tolerably clear. The Rájbansís and Kochs in Dinájpur drink intoxicating liquors without disgrace; but they abstain from swine's flesh and fowls, in which the Palís are not ashamed to indulge. The principal difference between the Rájbansís and the Kochs is, that the latter condescend to carry the palanquin, which the others do not. All the three tribes are cultivators and weavers. There are still Kochs remaining [apparently in Dinájpur], who use a language totally different from that of Bengal, who retain the old simple worship, and have no dealings with the Bráhmans.' It is interesting that, on two important points of detail, this account of Dr. Buchanan-Hamilton has received unconscious corroboration at the present day. The Deputy-Commissioner of Kuch Behar State remarks that the Kochs, as distinguished from the Rájbansís, are known as palanquin bearers; and Mr. Lowis, C.S., who was for three years Collector of Maldah, affirms that the Palís, who are very numerous in that District to the east of the Mahánandá river, possess, in addition to other non-Hindu peculiarities, a language of their own, which appears to differ from Bengalí, and which was not intelligible to a

couple of Christian catechists who attempted to converse with them. It would be curious to learn whether the language, manners, and religious practices of the Palís, who live much in the jungle, mix as little as possible with the Bengalí villagers, and are in all respects less civilised than the Rájbansís proper of Kuch Behar, have anything in common with the Páni-Koch, who are described as follows by Dr. Buchanan-Hamilton in his MS. Account of Rangpur :—

'The Páni-Koch live amidst the woods, and frequently change their abode in order to cultivate lands that have been enriched by a fallow. They cultivate entirely with the hoe, and seem to be more successful than their neighbours who use the plough; for they weed their crops, which the others do not. As they keep hogs and poultry, they are better fed than the bulk of the Hindus; and as they make a fermented liquor from rice without distillation, their diet is more strengthening. Their clothing is made entirely by the women, as is the case, indeed, with all the people of Kámrúp who adhere to old customs. The cloth is in general dyed blue by themselves with indigo, which they grow; and it has usually, also, a red border dyed with wild Morinda. The whole is woven of cotton of their own rearing; and they may be considered to be better clothed than the common Bengalís. Their huts are at least equally as good as those of their Hindu neighbours, and are, in some cases, raised on posts, as a refuge, apparently, from the attacks of wild elephants,—a mode of building which is common to most of the other rude tribes in this part of the country. Their only arms are spears, and they use iron in their implements of agriculture, which is not the case in many parts of Rangpur that are considered more civilised. The Páni-Koch are permitted to eat swine, goats, sheep, deer, buffaloes, rhinoceros, fowls, and ducks; and they sometimes snare peacocks. They do not eat beef, and also reject dogs, cats, frogs, and snakes, which are used for food by some other of the wild tribes. They use tobacco and strong liquors, but not opium nor hemp. They e[illegible] tame animal, unless they have previously offered it to their [illegible] Their ideas of rank are diametrically opposite to those of [illegible] Hindus. They consider that a man is higher the more indulge[illegible] he gives to his appetite; they acknowledge the superiority of t[illegible] Gáros, who are eaters of beef, while they assume precedence ove[illegible] the Rájbansís, who refuse most kinds of animal food. The me[illegible] are remarkably gallant, having resigned all rights of property to the

women; while the latter, in return, are exceedingly industrious. They spin, weave, plant, sow, brew, and in short do everything that is not beyond their strength. When a man marries, he goes to live with his wife's mother, and obeys her orders and those of his wife; when a woman dies, the family property is divided among her daughters. Marriages are usually settled by the mothers of the parties, when they are young, but not without consulting their inclinations. Women who happen to have grown up without being married, select a husband according to their own discretion, and they may marry again after their husband's death. The expense of marriage falls heaviest on the mother of the girl, who pays Rs. 10 (£1), while the boy's mother gives only Rs. 5 (10s.). This large sum is expended on a feast given to the relations, and on the sacrifice of a fowl to their god. No man, under such circumstances, can be permitted to have more than one wife. Adultery on the part of the husband is punished with a fine of Rs. 60 (£6); and if the offender's family will not pay this enormous sum, he is sold as a slave. Intermarriage with other tribes is not tolerated, and cohabitation with a stranger is prohibited under penalty of a fine. The dead are kept two days, during which time the family laments; while the kindred and neighbours assemble to eat, drink, dance, sing, and make merry. The body is then carried to the bank of a river and burned; after which all bathe, and return to their usual occupations. A funeral costs Rs. 10 (£1), as during the two days of mourning several swine must be sacrificed to the manes.

'The Páni-Koch possess no sort of learning; but among them are several persons called Deoshís, who are supposed to know more than their neighbours of the manner in which the gods are to be appeased. Although the proper name of these persons in the Koch language is Deoshí, they are frequently called Bráhman, and sometimes Dálái Lámá—in fact, by any name that the Koch have heard is respectable. The Deoshís are married, and work like other people. The office is not hereditary, and every one is at liberty to employ whatever Deoshí he pleases; but some one always assists at every sacrifice, and receives a share. They sacrifice to the sun, moon, and stars, and to the gods of the woods, hills, and rivers. Every year, also, when they gather the first crops, they offer some of the fruits and a fowl to their deceased parents, calling them by name, and clapping their hands. They do not, however, seem to believe in a future state. The principal worship is paid to a god

named Rishí, and to his wife Jágo. Every year, at the end of the rainy season, a grand sacrifice is made to these deities by the whole tribe, and occasional sacrifices are offered on all occasions of distress. There are no images. The blood of the sacrifice is left for the deity, while the votaries eat the flesh. The people call on the names of their gods and clap their hands; but they have no drums. The Hindus, as usual, say that Rishí and Jágo are the same as Siva and Párvatí; and the Páni-Koch are not altogether averse to this identification.

'They never apply to the officers of Government, but settle all their own disputes, by means of a council composed of the men alone, who submit to their wives only in the management of their domestic affairs. If a man incurs a fine heavier than he can pay, he becomes a slave, or mortgages himself, unless his wife chooses to redeem him. The slave works for his master, and receives food and raiment.'

In illustration of the preceding paragraphs, it may be remarked that priority is also assigned to descent in the female line both among the Kásiás and the Gáros;[1] that Deoshí is the name for the priests among the Bodos, whom Colonel Dalton connects with the Deorís, who perform similar functions for the Chutiás and the Kácháris;[2] and that the supreme deity is called Rishí both by the Gáros and the Rábhás.[3] On this last word, Colonel Dalton remarks that 'the saints called Rishís (the constellation of the Great Bear) occupy a conspicuous place in the Hindu books; and the Rishí of the Rábhás is considered very old (*rishí* = a beard).' It has already been observed that the burning of their dead by the Páni-Koch separates them from aboriginal tribes generally, and from those in especial who have come under Buddhist influences.

In regarding the Páni-Koch as the original type of all those who are now called Kochs or Rájbansís, Dr. Buchanan-Hamilton is followed by every subsequent authority except Colonel Dalton. Concerning the religious belief of the Hinduized Kochs he makes the following observations:—'As soon as the Koch became celebrated in tradition or history, we find that they adopted a priestly class called Kolitá or Koltá, who possessed some learning and books in Bengalí. The Kolitás long continued to be the spiritual guides of the Kochs, and in some places still [1810] retain by far the chief authority over that people. In Assam there are several religious

[1] Dalton, pp. 57, 63. [2] *Ibid.* p. 85. [3] *Ibid.* pp. 59, 87.

instructors of this class, whose influence is almost on a level with that of the temporal rulers. What tenets were professed by the Kolitás, while they continued independent of the Bráhmans, I have not been able to learn. That they were not orthodox, is evident from the Yogini Tantra, which calls the Koch Hájo, the chief of the followers of the Kolitás, a Mleccha or barbarian. At this time, however, the Koch had in general betaken themselves to the plough, and the Kolitás could read the Bengalí character, which seems to have been in general use. The power of the Kolitás received a severe check from the introduction of Kámrúpí Bráhmans by Visu, the grandson of Hájo, who chose them as his guides in religion; and the Kolitás fell under the necessity of following the example of their prince, and receiving instruction from the sacred order. Still, however, they retain much influence even under the Bráhman rule, and more than one of the princes of Behar have rejected the Bráhmans, and chosen to return to the guidance of the ancient priesthood. The Kolitás have now entirely adopted the Hindu worship and customs, and are contented to be considered as pure Súdras, an honour that is not conceded to them in any place except where they enjoy power. Elsewhere, they endeavour to pass as Káyasths, and [in Dr. B. Hamilton's opinion] all the Bárendra Káyasths are of this origin. The Kolitás have not so far separated from the Kochs as to reject intermarriages; they frequently honour a Rájbansí by accepting the hand of his daughter, but in such cases the wife may not eat with her lord. The Kolitás, as well as most of their followers, have taken the part of Krishna, and assume the title of Bhakat or Bhakta, that is, "worshippers," as being those alone who worship the true god. They have of late [1810] been very successful; and in Assam especially have converted not only the sovereigns of that country, but many of the ignorant tribes of mountaineers, Gáros, Rábhás, [illegible]hs,' etc.

RELIGIOUS DIVISION OF THE PEOPLE.—In the Census Report of [illegible]2, the adult males only of Kuch Behar, and not the whole [illegible]ulation, are classified according to religion. Out of a total of [illegible],396 adult males, exactly one-third of the entire population [illegible] the State, 127,928, or 72 per cent., are Hindus; 48,086, or 27 [illegible]er cent., Muhammadans; 5 Christians; 1 is a Buddhist (a Chinese [illegible]carpenter); and 376 are grouped as 'others.'

The Deputy-Commissioner reports that there are a few followers

of the Bráhma Samáj, although no regular Samáj has been established in Kuch Behar. The Muhammadan religion does not now make any progress in the State. During the time of the Muhammadan power, Kuch Behar was frequently overrun by Musalmán troops. A number of the soldiery settled down in the country, others followed, and the number was increased by conversions. There are no Wahábís or Faráizis; and no new sect, either Muhammadan or Hindu, is springing up.

URBAN AND RURAL POPULATION.—The Special Census Compilation thus classifies the towns and villages of Kuch Behar; but it must be recollected that the Census 'village' is in this case altogether an artificial unit:—Villages with less than 200 inhabitants, 499; from 200 to 500, 579; from 500 to 1000, 95; from one to two thousand, 16; from two to three thousand, 4; from three to four thousand, and from four to five thousand, 1 each; from five to six thousand, 3; from six to ten thousand, 1.

The entire absence of towns or even villages, in the proper sense of the term, is thus graphically described by Captain Lewin:—

'There are literally no villages in the State. This perhaps results from the conditions of land tenure existing, but its effects upon the natural characteristics of the country are as follow:—The entire State is divided into small farms, and upon each farm (locally known as a *jót*) is built the home of the farmer, with the houses of his immediate relatives, and perhaps an under tenant or two. Hence the whole country, throughout its length and breadth, consists of small circles of cultivation, each with its central homestead, shut in and embosomed in bamboo, plantain, and other quickly growing trees. Since the temporary administration of the State by the British Government, judicial and revenue Subdivisions have been formed; and round these local centres of official life some small collection of humanity has commenced, the inception of what may in the future become towns.'

KUCH BEHAR TOWN, 'the only place in the whole State worthy of the name of town,' is situated in N. latitude 26° 19′ 25″, and E. longitude 89° 29′ 13″. It is thus described by Captain Lewin —

'Surrounded on three sides by two small streams, both called Torshá, which enlap the town in their sinuosities, the site of Kuch Behar town still recalls the days when the dread of the Bhutiás caused the position of a town to be chosen more with a view to defensive than to sanitary or commercial considerations.

The inner enclosure is surrounded by a rampart at about a hundred yards from the ditch. In neither inner nor outer enclosures are there any traces of buildings. At some distance from the south of this existed a circular mound of earth called Harish Chandra-pát, which before it was disturbed might have been fourteen feet in diameter. The heap was opened by an indigo planter, and a stone building was discovered. The upper portion of the building, consisting of many long stones, was removed. In its present state [1809], only the lower part of the building remains, and comprises a cavity of about thirteen feet square at the mouth, and eight feet at the bottom. The sides are lined with squared stones, which form a steep stair on each side; the walls are exceedingly thick. I have no doubt that this is a tomb, probably that of Harish Chandra, whose daughter was married to Gopí Chandra, the son of Mainávatí, and who succeeded his uncle, Dharma Pál, in his government.'

THE RUINS OF KAMATAPUR.—This city was founded by Rájá Níladwáj, the first king of the line which succeeded the Pál dynasty in the government of Kamrúp. It is situated in Kuch Behar territory, on the western bank of the Dharlá river. Buchanan-Hamilton states that the place is usually called Lál Bázár by Europeans, from a small village of that name in its neighbourhood. The following description of the ruins as they existed in 1809 is quoted almost verbatim from Dr. Buchanan-Hamilton's MS. Account of Rangpur District:—

'The ruins of Kamatápur are situated on the west bank of the Dharlá, which formed the defence of the city on one side. The river has recently shifted its course farther to the east, but the old channel, which now occupies the east side of the old city, shows that formerly it was of great magnitude. The ruins are intersected by a small river, the Singímárí, which has destroyed a considerable portion of the works, both where it enters and leaves the city; the stream was, however, probably kept within bounds when the city was inhabited. The city is of an oblong form, and, so far as I could judge by riding round it on the inside of the inner ditch, about nineteen miles in circumference, of which perhaps five miles were defended by the old channel of the Dharlá. The remainder was fortified by an immense bank of earth, and by a double ditch. The earth from the inner ditch seems to have formed the rampart; and that from the outer ditch was thrown towards the country so as to form a kind of glacis, but without a covered way. By this means the

rampart and outer ditch were made of the greatest possible dimensions, with perhaps the least labour. In its present state [1809] the inner ditch is of very variable width, and never seems to have been uniform; but the encroachments of agriculture, no doubt, have occasioned an appearance of greater irregularity. The rampart at present is in general about a hundred and thirty feet in width at the base, and from twenty to thirty feet in perpendicular height; but it has probably lost much of its elevation, and the base has widened, by the earth which has been washed down on a counterscarp, of which, however, there is now no trace. The rampart has, no doubt, been chiefly of earth, and there is no trace of its having even been faced with brick; but from the number of bricks everywhere scattered about, there was probably a brick parapet on the summit of the earthen rampart. The outer ditch has been about two hundred and fifty feet wide. In its present state, no estimate can be formed of what its depth was; but from the greatness of the slope formed by the excavated earth, this must have been considerable. These works run in straight sides of very unequal lengths, and have had no towers, bastions, nor flanking angles. Three gates are shown, and I thought that I could trace on the west bank of the Singímárí the remains of a fourth, near where the camp of the Muhammadan besiegers was placed. At that place there were no ditches, but in their stead several additional works, both within and without the rampart, just as at the other gates.

'About two miles west from what I suppose to have been a gate, and from the Singímárí river, is an evident gate, which has been strengthened by many works both without and within the rampart, in order to supply the deficiency of ditches, for drawbridges formed no part of ancient Hindu military architecture. Both the gate and these additional works were constructed of brick, and the gate was supported on stone pillars, on which account it is called the *siládwár*. The stones are quite rude and contain no carving. Rather more than two miles from thence is another similar gate called *bágh.dwár*, which is said to have derived its name from having had over its entrance the image of a tiger. On the north side of the works there is only one gate, situated about a mile from the Dharlá. This gate is also constructed of brick, and is called *hokodwár*, probably after the name of an aboriginal chief of this part of the country, where the name of Hoko is by no means unusual. Immediately contiguous to this gate, and situated between it and a road

leading to the north, is the fortress in which the *patra* or Rájá's chief minister resided, its extent being somewhat less than a mile square. These fortifications are very inferior in strength to those of the city, by which it was entirely commanded.

'Beyond the residence of the minister, at a little distance farther north, I visited what is called the king's bath, which I found in a tobacco field, at a place called Sitalvas, a name that implies coolness. There is no trace of buildings, so that the bath may be supposed to have been placed in a shady grove. It consists of a large mass of grey granite hollowed out in the form of a rude goblet. The sides are six inches thick at the brim; the total diameter at the brim being $6\frac{1}{3}$ feet, and the cavity $3\frac{1}{2}$ feet deep. A small projection on the inside seems to have served as a step to facilitate the descent into this rude bath; which, as there is no step on the outside, was probably sunk in the ground to the level of the surface. It is totally destitute of the least elegance of form or beauty of workmanship, but must have cost a great sum in the carriage. These are all the objects of curiosity that I observed in viewing the outer parts of the city.

'Within, the chief object is the citadel (*pát*) or royal residence, which is situated near the centre of the city. It is of a quadrangular form, and is surrounded by a ditch about 60 feet in width, about 1860 feet in length from east to west, and about 1880 feet from north to south. Within the ditch there has been a brick wall; and without it, a rampart of earth. On the north and south faces, the wall has been immediately contiguous to the ditch, but on the east and west sides there has been a wide counterscarp. Outside the rampart, at the south-west corner, are several small tanks; and a long marsh, once probably a river, extends along the remainder of the southern front. On the other three sides, this inner citadel has been surrounded by an enclosure about three hundred yards in width. This also was defended by an earthen rampart, and was divided into three different spaces of very unequal magnitude, which probably served to accommodate the various departments of the Rájá's domestics. In these outer enclosures there are some small tanks, but no traces exist of any buildings. The domestics, indeed, were probably lodged in huts.

'Within the brick wall of the inner enclosure, the most striking object is a large mound towards its northern face. It is about 360 feet square at the top, and 30 feet high. The faces have evidently

been lined with brick, and have had a considerable slope. At the south-west corner, some part of this facing is still [1809] nearly entire, having been defended from injury by a small tank. The interior of the mound consists of earth, which seems to have been taken from a number of small tanks which are adjacent. One of these tanks seems to have been intended as a defence for the south-east angle of the place, as it is surrounded by a wall. I dug to some depth in the mound, in order to ascertain whether it originally formed any structure, as there were many bricks scattered about its surface. I found, however, only earth and sand. Towards the north and south faces of the mound there are two wells about ten feet in diameter, and lined with brick, which, of course, went through the whole depth of the mound, and perhaps twenty feet lower, till water was reached. I could only observe two places on the mound which bore any appearance of having been buildings; but many bricks have been removed in order to construct an indigo factory. Towards the east side is a small, square heap, which is said to have been the temple of the goddess Kamateswarí, which is extremely probable. The other ruin, situated towards the west side, has been paved with stones, and is supposed to have been the Rájá's house; but this, I suspect, is not so well founded. Besides the fact that such a proximity to the residence of the presiding deity of the kingdom would not have been decent, the place is exceedingly small, and totally unfit for the residence of a prince. It seems to me more suitable, in situation and size, for a building in which, on days of great solemnity, the image of the deity would be placed. It is stated that the bricks taken to build the indigo factory were of a very large size, and as smooth as the best bricks made in Europe. Those that I saw, however, were very rude, such as are commonly made in India.

'The space to the south of the mound has been divided into two rather unequal divisions by a brick wall. In the eastern of these divisions are several heaps of bricks, which seem to me to have been the foundation of wooden, or perhaps thatched walls, in which the Rájá transacted business, or gave audience. In this division, immediately to the east of the mound, is a tank of the same length as the mound, and of more than half its width. It is said that the Rájás amused themselves by keeping some tame crocodiles in this tank, which sends off a branch to surround a small mound at its north-eastern corner. This mound contains many bricks, and has probably been another

temple. On the east side of this tank is another mound of bricks, which is said to have been the armoury, and must have been a large building. The western division of the area below the great mound is the smallest, and probably contained the Rájá's most private apartments, the southern part being where he entertained his friends, and the northern part where he kept his women. In that quarter there is a considerable space, bounded on the east by the great mound, on the west by an earthen rampart, and on the south and north by brick walls. A large, irregular heap in the middle of this was, perhaps, the private chapel of the ladies, and near it are two tanks which have been probably lined with stone. The buildings were probably of wood or of bamboos, as were also those in the southern quarters of the division. The Rájá's own private chapel was probably in what is now a shapeless heap, contiguous to the tank, which bounds the south face of the great mound at its western angle. Near the west end of the northern face of the brick rampart, and also near to what I suppose to have been the women's apartments, there has been a large brick building, which has fallen outwards and filled the ditch. This was probably the station of the guard.

'Stones are found in several parts of these ruins, especially in the tanks situated in the space which I suppose to have been taken up by the women's apartments, and in that which I have supposed to be the temple in which the image of Kamateswarí was exposed at festivals. Most of the stones which remain are entirely rude and uncut, and the marks of wedges by which they have been split are very evident. I only observed two stones that had the marks of a chisel. One was apparently part of an entablature of red granite, and was extensively, but very rudely, carved. It was lying below the north-east corner of the great mound, from which it had probably fallen. The other was a fragment of a column of grey granite, about eight feet long, and eighteen inches in diameter. It is very rudely carved; the shaft is an octagon, and the pedestal or capital square. The people of the locality say that it was one of the dumb-bells used by Rájá Nílambhar. The building of the citadel is gravely attributed to Viswakarma, the architect of the gods. As for the great outer rampart of the city, it is universally agreed that, on the approach of the Muhammadan infidels, it was built by Kamateswarí. The reason assigned for its not being completed on the side towards the Dharlá, is that the Rájá was ordered to fast four days on the

occasion; he fasted for three days, but being unable to endure hunger any more, he took food on the fourth day, and of course only three sides of the work were completed.

'A great road led through the city in an easterly and westerly direction, but not in a straight line. Its east end reached to the Dharlá river, and its west end to the *bághdwár* or tiger-gate; it passes a few hundred yards to the south of the residence of the king. Throughout the whole way between these two last-mentioned places, but at considerable intervals, may be traced the foundations of square enclosures or fortifications, which formed, according to popular tradition, and in all probability really were, the abodes of the principal officers of State. In most places in this direction, which seems to have been the fashionable part of the city, many scattered bricks are found, but there is nothing to indicate that there was ever any large brick building here. About a mile from the royal residence in this direction is the channel of the Singímárí river, which is constantly changing its course, and may have carried away many of the ruins, as all the southern parts of the town are miserably torn by its old courses. It is navigable in the rainy months, and in the dry season has a fine clear stream of water. Beyond the Singímárí is another small channel, over which there has been a bridge of two small brick arches. These have partly fallen in; they were of a rude Gothic form.

'A little way from the *bághdwár* or tiger-gate, is a small area paved with stone, called Gauri-pát, where there is a portion of an image of Siva. Around, there are many bricks and foundations; and this probably marks the site of a temple which was violated by the zeal of the Muhammadan conquerors, especially as the Musalmáns appear to have erected considerable works in the vicinity. The chief of these works is a tank lined with brick. It is about three hundred feet from east to west, and two hundred feet from north to south, and is surrounded by a terrace enclosed by a brick wall. On each side there is a descent to the terrace and from thence to the water, by very fine steps of cut granite, which give two clear indications that the stones for the purpose were taken from ruins. One is, that in one place a column has been used for a step; and another, that a stone containing carved figures has been built into the stair, with a total neglect of symmetry with the adjacent parts, which could not have been deliberately intended. The Hindu natives of these parts assert that the tank is the work of an

officer of one of the Behar Rájás. I am still, however, inclined to think that the tank is of Muhammadan workmanship. On its south side, near the west corner, are the traces of a building in the Moorish style; and near it is another dwelling-house built of brick, which is said to have been for some time the residence of a certain Lálbayí, a favourite concubine of the conquering Muhammadan chief. The building is small, and evidently of Moorish architecture. Whoever built the tank, however, there can be little doubt but that the materials came from the royal residence, and also that much greater works were in contemplation; for the road about half a mile from the tank is for a considerable distance strewed with large carved stones, which I have no doubt formed part of the ornamental architecture of the citadel.

'Concerning these stones there are two traditions. The first states that Rájá Nílambhar was collecting materials for a grand building, when the Muhammadan army made its appearance before his capital. The other is, that the stones formed part of his palace, and were taken away by the Muhammadans for some of their works when the invaders were compelled to evacuate the country. This last appears to me to be the most probable. It is not, however, to the Musalmáns alone that the dilapidation of the royal abode of Kamatápur can be attributed. The Rájás of Kuch Behar have also aided in the work, and have carried away many stones from the city. In the counterscarp of the east face of the citadel, the present [1809] Rájá of Kuch Behar discovered a very large pillar, which he removed, with the intention of adorning his own capital with it. He succeeded in placing it upon a wheeled carriage, and in conveying it to within a short distance of the place which it was intended to ornament, when the carriage gave way, and in the fall the column was broken. It is said to have been twenty-two cubits in length, by two and a half cubits in circumference.

'Besides the great road leading east and west, other roads lead from the palace to each of the gates; but along these I observed no traces of buildings. In all probability the great space within the ramparts was occupied by scattered huts and gardens, and in many parts probably by cultivated fields. The only other building that I observed was a large square enclosure near the principal road, about three-quarters of a mile east from the palace, where it is said the treasury was situated.

'It might naturally have been supposed that on the conquest of

the city, the zealous followers of the Kurán would have destroyed the idol of Kamateswarí, but the worshippers of the goddess do not accuse them of such an action. Hindu tradition has it, that, on the fall of the city, the fortunate amulet of Bhagadatta retired to a pond near which the Singímárí enters the city, and there remained concealed until a favourable time for re-appearing occurred. This happened in the reign of Rám Náráyan, the fourth of the present line of Kuch Behar Rájás. A fisherman, on throwing his nets into the pond, was unable to draw them out again. He was informed of the cause in a dream, and directed to inform the Rájá of the manner in which the deity expected to be received. A Bráhman was sent upon an elephant having with him a silken purse. Having found the amulet under water, it was there placed in the purse; and thus concealed, was placed on the elephant, as it was unlawful for any person to behold the emblem of the goddess. The elephant went of his own accord to a place on the banks of the Singímárí, near where that river leaves the old city, and halted at a place called Gosáinímarái, where the Rájá built a temple for its reception in 1587 *Sák* era (1665 A.D.). The temple buildings are of brick, with a few stones, evidently taken from the ruins of Kamatápur, and surrounded by a brick wall with an octagonal tower at each corner. The enclosure is planted with elegant flowering trees, which, intermixed with the white domes and buildings, look very well when viewed from a distance, but on a near approach everything is found rude and destitute of taste; the structure, too, is disfigured by an indecent plaster-work figure. The shrine is covered with a dome, and the architect was therefore, in all probability, a Muhammadan. The priests are remarkably accommodating. I was led up to the threshold of the shrine without even being desired to take off my shoes; the doors were thrown open, and I was allowed to see the small tawdry image in which the amulet is concealed from view. There are a few gold and silver utensils placed under the wooden throne on which the image is placed. In one of the towers at the angles of the wall is a stone containing an image of Vasudeva, exactly in the same style of carving as that of the stones lying between the Rájá's residence and the *bághdwár* gate of Kamatápur. It was found in the first year of the present century on the great mound at Kamatápur, which would seem to clearly indicate the place from whence the other stones have been taken.

'I shall finish this account by describing the remains of the

camp of the Muhammadan invaders. It is called the *baraghar*, from its being supposed that it contained twelve houses of brick in which the Musalmán chiefs lived during the seige. The attack seems to have been directed against the spot where the Singímárí leaves the city. The site of the camp is on the bank of the Singímárí, about a mile from the city, and was defended by the river, which here takes a semicircular bend. Between this bend and the city is a large mound which served as a redoubt; and the side of the river next the camp is strengthened by four other such works. The rear of the camp is surrounded by a strong rampart of earth and a wide ditch. This fortification, which is only about three miles in circumference, could merely serve for a moderate detachment of the army, while the greater part went in search of forage and provisions. The plain between the camp and city is called Sawárígánj, probably from its having been the place where the Musalmán cavalry paraded.'

The fall of Kamatápur is attributed to the vengeance of Rájá Nílambhar's prime minister, a Bráhman named Sochi Patra. The Rájá caused the son of the minister to be killed for some offence and part of his flesh to be cooked, of which he contrived that the father should partake. The outraged Bráhman went to the court of the Afghán kings at Gaur, and procured the invasion of the country by the Musalmáns. After a lengthened siege, the place was at length captured by stratagem. The Muhammadan commander gave out that he despaired of success, and proposed a peace. He asked and obtained permission for his ladies to go and pay their respects to the Hindu queen; but armed men were concealed in the litters instead, who captured the town. Rájá Nílambhar was taken prisoner, and put into an iron cage to be taken to Gaur; but he escaped by the way, and has ever since remained concealed. Dr. Buchanan-Hamilton says that the people still look for his restoration, when the Muhammadan usurpers, Bhutiás, Assamís, Kochs, and Yávanas (western barbarians) shall be driven out of the land.

CLOTHING, DWELLINGS, FOOD, ETC. OF THE PEOPLE.—The well-to-do residents of the town generally wear a waist-cloth hanging down over the thighs (*dhutí*),.a shirt or coat (*jámá*), and a cotton sheet or shawl (*chádar*). In the rural tracts, both shopkeepers and well-to-do cultivators wear nothing but small waist-cloths, and cotton shawls for use in the cold season and on special occasions.

The poorer class of cultivators, when at home, simply wear a small strip of cloth for decency's sake.

The buildings of the people consist of a number of small huts collected together within a mat enclosure. Bamboos, which sell at about Rs. 3 (6s.) a hundred in the interior, and thatching grass, are the principal building materials used, the soil being so sandy that no mud walls can be built. The homestead of a well-to-do shopkeeper generally consists of eight or nine small huts within an enclosure; and that of a husbandman, of six or seven huts. These huts are each from fifteen to twenty feet long, by from seven and a half to about thirteen broad. Many of the well-to-do cultivators have more substantial dwellings, with verandahs, etc., in their enclosure or compound.

The people generally sleep on bamboo platforms (*machans*). A few pillows, two or three quilts for winter, a few wooden seats and mats, and some brass or bell-metal cups, plates, and cooking utensils, complete the list of ordinary household furniture.

Rice forms the staple article of food; vegetables of different kinds, such as *báigun*, *kumrá* (pumpkins), *ság kalá* (plantains), *thor*, etc., are used in preparing curries; fish is eaten in small quantities about two or three times a week. Pulses are very dear in this part of the country, and are not ordinarily used for food.

A well-to-do shopkeeper, with a family consisting of five adults and four children, spends on an average about Rs. 20 (£2) per month in living expenses; while the monthly expenses of the family of a fairly well-off husbandman amount to about Rs. 14 (£1, 8s. od.). In the latter case, the price of the rice and vegetables which are grown by the cultivator himself, and of the fuel which his family collects from the jungle, is included in the amount. It should also be borne in mind that many of the shopkeepers combine agriculture with trading, and by using the produce which they raise themselves, save the expense of purchasing many articles in the *bázár*.

The following paragraphs, descriptive of the manners and customs of the Koch or Rájbansís at the present day, in so far as they differ from their Hindu neighbours, is quoted from 'The Account of Kuch Behar State,' by Captain Lewin, B.S.C., who acknowledges his indebtedness to Bábu Jádab Chandra Chakrabartti, the *faujdárí ahilkár*, or Magistrate of the State, 'who has resided a long time among the people, and made their social observances his special study.'

FOOD, ETC.—'The Rájbansís do not object to eating the flesh of the pig, but they will not eat beef or fowls. Their ordinary diet is of the poorest, consisting of rice and a few vegetables only; some make their own salt, from ashes. The women cook the food, assist largely in the field labour, husk the grain, and often weave the clothes required by the family.

DRESS, ETC.—'The lower order of people generally wear a *languti* of cotton cloth, a foot or less in breadth, and three feet in length; this passes between the legs, and is fastened at both ends to a cord passing round the waist. A coarse cotton mantle is worn during the winter, which has generally been woven by the females of the house. When going abroad, the men wear a *dhuti*, generally nine feet long, and from three to four feet broad; a cotton cloth is thrown round the shoulders, and old men often tie a piece of cloth round their heads. The women are comparatively better dressed. When at home, they wear only one piece of cloth, called *patni* or *tolá*, which is tied round the body a little above the breast, and is broad enough to reach below the knee. But when they go out, two such pieces are worn—one, called *patni*, is tied round the waist, and the other, called *ágran*, is folded over the breast. The people residing in the neighbourhood of the town have altogether adopted the Hindu mode of dress. The ornaments generally worn are white shell bracelets on the left wrist; necklaces of beads are invariably worn by young women. The better class only have a few ornaments made from the precious metals, which are worn on high days and holidays.

CEREMONIES AT BIRTH AND IN EARLY LIFE.—'The Koch or Rájbansí build no new or separate house for the lying-in of their women, as is the custom of the Hindus; any dwelling-house serves the purpose. For thirty days after the birth of the child the mother is considered to be impure; any one that enters the house in which she lies is required to bathe before he or she can re-approach their fellows, or touch any article of furniture or clothing. In order to protect the house against evil spirits or *deos*, branches of thorny trees or prickly creeper are stuck in the walls. Immediately after the birth of the child, some respectable elderly female relative of the parents cuts the umbilical cord of the child with a thin sharp slip of bamboo; and this woman is always regarded by the child, in after life, as a second or foster mother, and is called his *nári kátá mai*. On the thirtieth day, the family barber

cuts the nails of the mother and child. The holy water is prepared by the *purohit* or Bráhman family priest, who, after placing therein sprigs of the sacred *túlsi* plant, some grains of *átap* rice, with *dub* grass and *bel* leaves, pronounces incantations (*mantras*) over the mixture, which is then sprinkled over all members of the household, especially on the mother and child. Amongst the lower orders of the Rájbansí the child is named within ten days of birth; but the well-to-do class consult astrologers, or Acharjya Bráhmans, and name the child on the 3d, 7th, or 30th day, according to the indications of astral influence.

'In the 7th, 9th, or 11th month the *bhátsoá* (touching rice) or *ánnáprasan* ceremony takes place. People of the better class perform a *sraddh* or religious ceremony on this occasion, invoking the spirits of their forefathers, to whom are offered *pindu* or rice cakes. The poorer classes simply make an offering of *átap* rice and plantains. The *ádhikáris*, who are of the Rájbansí caste, minister at this ceremony. An earthen pot coloured with vermilion is filled with water, and in it are placed a twig of mango tree, some betel-leaves and betel-nuts. The young women of the house, and those of their female neighbours who are not widows, attend at the ceremony. A *chalan-báti* or sieve of split bamboo is prepared for the occasion, on which are placed five earthen lamps filled with oil, and lighted. In front of the earthen pot, the child is made to sit and eat rice, for the first time in his life. The first mouthful of food is generally administered by the child's grandmother.

'On the 6th, 12th, or 18th month the head of the child, be it male or female, is shaved. This is done outside the house, within a circle made with small pith figures of horses, and miniature flags; a *charká* or spinning machine is also placed on the ground. The first growth of hair is supposed to be due to a deity called Buri Mákewámí. The hair thus shaved is generally removed to the shrine of this goddess, but in some instances it is buried, or left on the spot where the child was shaved. From the Rájá down to the poorest man this ceremony is most scrupulously observed.

'The rite of *chura-karna* is, to all intents and purposes, a formal profession of faith, or entry into Hinduism, and must be undergone by every child, male or female, at some time before marriage. The *ádhikárí* makes an offering to the goddess of rice and fruit; the head of the child is thoroughly shaved, and the barber perforates

the lobe of the ear with a needle or thorn, the quill of the porcupine being sometimes used for this purpose.

'The ceremony of *do-kapra* is performed when a girl arrives at the age of puberty. The young women of the neighbourhood assemble together, and tie a cloth (called *agran*) round the breast of the girl; from that day she is considered a woman and no longer a girl.

'Every man or woman is twice religiously instructed in his or her life; but there is no fixed time in which one must receive these instructions. When young, the *ádhikárí* whispers in the ear of the child the name of the god Hori. At a more advanced age, he whispers the *guru mantra*, or spiritual teacher's charm, in the ear of his disciple, who makes some present in return, and thereafter considers the instructor as his spiritual father and preceptor. The disciple is required to utter this *mantra* every day after bathing, and also before taking his meals.

MARRIAGE CEREMONIES.—'There are three kinds of marriage prevalent in the Koch or Rájbansí tribe, viz. (1) *Gandharba;* (2) *Bráhma;* (3) Widow Marriage. The first and the third are not sanctioned by the ordinary custom of Hindu society.

'(1) *Gandharba Bibáha.*—Marriages of this description, as performed amongst the Rájbansí, differ in almost all essential particulars from the same ceremony as sanctioned by the Hindu *Sástras*. The essence of *gandharba* marriage should be, that the bride selects her own husband, and therefore none of the friends or relatives of the bride or bridegroom are expected to take part in the matter. But the case is quite different with the *gandharba bibáha* of the Rájbansí; the husband or his parents, as in regular *Bráhma* marriages, selects the girl, whose age varies from four to twelve at the most, and who at such an age is naturally quite incapable of making a selection for herself. The only ceremony performed on such occasions is the placing before the girl of the *chalan-báti*, before described, and the presenting her with a new cloth and shell bracelets (*sankh*) to be worn on the wrist. Flower garlands are also exchanged between the bride and the bridegroom. The services of the Bráhmans are not brought into requisition, as no religious ceremony is performed. The *chalan-báti*, which seems the main part of the ceremony, is placed before the girl by young married women whose husbands are living. This kind of marriage is seldom resorted to by the lower orders of the people, but it

prevails extensively amongst the higher classes. It is not held in very high consideration, although it is binding on both parties.

'(2) *Bráhma Marriage.*—This mode of union is sanctioned both by the *Sástras* and popular custom; other kinds of marriage are considered by the generality of the people as spurious, and therefore looked down upon. In this case, the matter is settled by the parents or friends of the parties, but the assistance of a third party, called *bhátáit* or *ghatak*, is always made use of, as a go-between in the first instance. If the parties agree, an auspicious day is fixed in consultation with the family astrologer, on which day the parents or relatives of the bridegroom send a quantity of betel-leaves and betel-nuts to the house of the bride. If the party deputed with these presents meet with any inauspicious omen on their way, they turn back home again, and the marriage is no more thought of. The following are considered as sights of ill omen:—A dead body; a funeral; a ditch recently cut; a leech; a snake, etc. On the other hand, should the party see on the way any milk, flowers, or fish, this augurs well for the future happiness of the marriage. After the party reach the house of the bride, the neighbours and friends on both sides assemble together, and the betel-nuts are cut or cracked in the presence of the gathering. If within three days after the cutting of the nuts, no inauspicious event takes place in the family, a notice to that effect is sent to the bridegroom's house, and a day is appointed for the marriage, while fish, flowers, new cloth, and shells are sent as presents to the bride. Among inauspicious events may be enumerated the following:—A death in the family; the occurrence of a fire in the house; the breaking of any earthen pots used in the kitchen, etc. If events like these happen, the marriage, if not abandoned, would be seriously delayed.

'On the day fixed, a religious ceremony called *nandi mukh* is performed, in which the spirits of the forefathers of the parties are invoked and offerings made to them; these ceremonies are performed in the houses of both the bridegroom and the bride. The bride, as a rule, is taken to the house of the bridegroom on a palanquin, attended by musicians and followed by friends. The marriage takes place at night in the court-yard of the bridegroom's house. Young women called *bairátis* remain in attendance with *chalan-batis*. The father or brother gives away the bride, in the presence of Náráyan (a stone emblem of the godhead); the Bráhman priests intone prayers or *mantras*, which the bridegroom and the father of the

bride are made to repeat. These *mantras* are repeated in Sanskrit, and consequently are not understood by the persons concerned. They are to the following effect:—Bride's father addressing the bridegroom, "Here is water for ablution. Do you accept of it?" The bridegroom replying, "I accept." "Here are flowers for you; accept?" "I do accept." "Here is the bride, by name so and so, the daughter of so and so, the grand-daughter of so and so; with shells, cloth, ornaments, etc. etc. I make over the girl to you; do you accept her as your wife?" The bridegroom replies, "I do accept her as my wife."

'The marriage knot is then tied, one end of the *chádar* or mantle of the husband being fastened to the *sárí* or veil of the bride. Within this knot is placed betel-leaf, a piece of gold, a piece of silver, etc. This knot must not be untied until eight days after the marriage. The bride is then made to sit on a *piri* or piece of board, and is thus carried seven times round the husband, who must stand up the while. She is borne by her own special friends; and the circuit is accompanied by the family barber, who holds an umbrella over the precious burden, chaunting a triumphant epithalamium. The father of the bride then sprinkles holy water on the heads of the couple. If the bride's father is not living, the sprinkling is done by some one else, who is called the *pani sitta bap* (father who sprinkles water). The *purohit* then performs certain ceremonies and invokes the aid of all the gods and goddesses to make the couple happy. Bráhma or Prajapátí is the deity who is especially supposed to preside over marriages. After the ceremonies are over, the married couple retire to their sleeping chamber. For eight days the bride remains in the house of the bridegroom; on the eighth day (called the *ustá manglá*) four bamboos or some plantain trees are planted in the court-yard, where the bridegroom and the bride are made to stand. They bathe there together, the *bairátís* with *chalań-bátís* remaining in attendance; the marriage knot is then untied, and the marriage is thus definitively concluded.

'(3) *Widow Marriage.*—This marriage, if it deserves to be called by that name, takes place without any ceremonies whatever; but the children of the union are acknowledged as heirs and successors to the property of their father. Such children, however, are not recognised as legitimate children in Hindu society, and the women are always looked down upon, even by the Rájbansí. The peculiar circumstances under which widows are received by men as wives have

given rise to different names by which such women are known, such as *danguá* wife, *dhoká* wife, *pashuá* wife. *Dang* means a stick, or a blow dealt with a stick; when a widow lives by herself, and a man goes to the house with a *dang* or stick in his hand, and strikes a blow with it on the roof of the house, and so enters in and takes possession of the woman, such woman is called a *danguá* wife. This mode of union is naturally only resorted to under previous arrangement between the parties. *Dhoká*, means "to enter into;" when a widow, of her own accord, enters into the house of a man, she is denominated a *dhoká* wife. *Pashuá* or *pash* means "afterwards;" a woman that is taken afterwards, that is, after she has been once before married, is called a *pashuá* wife. *Pashuá*, in fact, is the general name for widow marriage.

FUNERAL CEREMONIES.—'No one is suffered to die inside a house. A few minutes before death, the man is brought out and laid down on the bare earth, with his head towards the north; sprigs of the *túlsi* plant are placed near the head, and the names of gods are loudly called upon in chorus, by the relatives, in the ears of the dying man. After death, earth from the bed of the sacred river Ganges, which people generally keep in their houses, is mixed with water, and rubbed upon the forehead of the deceased. After the dead body is removed from the house, the place is carefully swept clean and purified. The corpse is bathed, and then removed by the relatives on a bamboo litter or bier, to be burned on the banks of some river. Four large bamboos are planted beside the funeral pile, and a fan, wooden shoes, an earthen pot, etc. are placed thereon; various sorts of grain are also thrown there. A torch is lighted and given to the son or other near relative of the deceased, who is made to walk round the pile seven times; the torch is finally applied to the face of the deceased, and the pile is fired. After cremation, one piece of bone, generally from the forehead, is kept separate, and buried near the place; on the tenth day, a *sraddh* (funeral ceremony) is performed there, and offerings of rice-cakes are made to the spirit of the dead. The piece of bone is then disinterred, and taken to the house of the deceased, where it is buried; at some convenient future time within the year, the bone is again disinterred, and taken to be thrown into the river Ganges.

'On the thirtieth day after death, all the relatives of the deceased have their heads. None may partake of fish during that period; but on the thirty-first day a *sraddh* is performed, when offerings

are made to the manes of the deceased, and cows, cloth, rice, brass plates, etc. are first consecrated, and then distributed amongst a low class of Bráhmans, who attend on such occasions. A feast is given to the friends of the dead man. On the thirty-second day, a separate collation is prepared, and partaken of by the immediate members of the family, who take fish on that occasion.

'Succession is chiefly regulated by the provisions of the *Diá-bhágá*, a learned work on the subject in the Sanskrit language; but local customs also are observed.

RELIGIOUS WORSHIP.—'Every village has its *thakur-pát*, the seat of its god, where the *deos* or evil spirits are supposed to reside; and whenever anything goes wrong in a family, the members make offerings there in order to appease the wrath of the *deo*.

'Every year, on the fourteenth day of the moon, in the month of Chaitra (February), the Rájbansís worship Madan Kámdeo, the god of love. Large, straight bamboos, covered with red cloth, and surmounted by *chamárs* (yaks' tails), are erected in the court-yard, and great rejoicing prevails. Songs of a loose description used to be sung on this occasion. The worship is continued for three days, and on the fourth day the cloth is taken off the bamboos and thrown away.

'A singular relic of old superstition is the worship of the god called Hudum-deo. The women of a village assemble together in some distant and solitary place, no male being allowed to be present at the rite, which is always performed at night; a plantain or a young bamboo is stuck in the ground, and the women, throwing off their garments, dance round the mystic tree, singing old songs and charms. This rite is more especially performed when there is no rain, and the crops are suffeirng from drought.

'Should a man be without children, he supplicates the god Kartik. This deity is worshipped on the last day of the month of Kártik (October). After the offerings have been duly made, all the male-kind retire from the place, and the young women of the neighbourhood assemble together, divest themselves of their clothes, and dance round the idol throughout the whole night; the musicians, who are shut up in a closed shed, keeping up a brisk rataplan of drums during the whole time.

'The snake goddess, Bís Hará (poison destroyer), is also very largely worshipped by the people. This is the more strange, as there are very few poisonous snakes in Kuch Behar.

…or small-pox prevail, the women go about from … and beg for alms. The dole thus obtained is …aking offerings to the *deos*, or evil spirits, through … influence mankind is supposed to be afflicted by …l sorts.'

…TURE.—RICE forms the staple crop of Kuch Behar. It is …to two great classes, namely, *bitári* or *áus*, and *haimanti* …*n*, each of which is again subdivided into a great many …rieties.

There are two crops of *bitári* or *áus* rice, the early and the late crop. Both are sown on high land, the former being scattered over the ground broadcast in February and March, and reaped in May and June; the latter is sown in May and cut in September. The land for the cultivation of *bitári* rice is first ploughed five or six times to the depth of six inches, the clods being well beaten and harrowed. After the seed is sown, the ground is again ploughed and harrowed. The seeds germinate in about ten days if the land is a little wet, in about fifteen days if it is dry. When the young plants are six inches high, the field is weeded and thinned by a large wooden rake with iron teeth (*bidá*) being drawn across it. Two other weedings take place subsequently. The cultivators of Kuch Behar do not at once cut down the plants to the root at the time of reaping the corn, but take the ears off, with about eighteen inches of straw, leaving the remainder of the stalk standing. The reason for their differing in this respect from the custom in other parts of Bengal is, that the straw is very hard and useful for thatching purposes; and also that the cattle may have green straw to eat, if it is not required for thatching. Sometimes, in very low marshy places, the seeds of the *áman* or *haimanti* rice are sown broadcast along with the *bitári*. The latter springs up first; and after it is reaped the other crop comes to maturity, and is cut in December or January. This crop is called *bás* or *boyá*; it is of a rather coarse grain, and is generally used by the husbandmen for their home consumption. It grows in a considerable depth of water, sometimes as much as twelve or thirteen feet.

The following are twenty-seven varieties of *bitári* or *áus* rice:—(1) *Chámpál* (large and small grain), (2) *kasiyá pánjá*, (3) *pábásí*, (4) *gáthiyá bhumrá*, (5) *cheng bhumrá*, (6) *murghí bhumrá*, (7) *kálathukrí* or *thukrí chengá*, (8) *ghunsri*, (9) *niláji*, (10) *bailbárásí* or *boyálídár*, (11) *biníthorongá*, (12) *káchánaní*, (13) *kála bhumrá*, (14)

dáikásáir or *amnachh kánái*, (15) *dhalkanchar*, *khairá*, (18) *dháriyá*, (19) *gariyá*, (20) *dhyán*, (21) *birmándálí*, (23) *chhaitán bhumrá*, (24) *harín kajál*, (26) *chaturul*, and (27) *paparbháj*.

There is also an early and a late crop of *áman* or *h* which is sown either on high or low lands. The seeds o are sown in different methods, called *taluyá* and *neoyacha* *taluyá* method, which is adopted for the early crop, the well ploughed and harrowed in March or April; the se ds are t sown broadcast, and the land is again ploughed and harrowed just after the sowing. The seeds sprout in eight or ten days; and in the month of June or July, the seedlings are transplanted into other lands prepared for them. Several varieties of *áman* rice of middling quality are nursed in this way. In the *neoyachá* method, which is adopted for the later *áman* crop, the seeds are sown after the first fall of rain in May or June, in a piece of land worked up into the consistence of mud by repeated ploughings and harrowings. The seeds sprout in about two or three days, and transplanting takes place in July or August. The best and most fragrant varieties of *áman* rice are nursed in this manner. The mode of preparing the lands into which are transplanted the shoots nursed in these two ways is the same. Small ridges of earth are constructed around the fields intended for their reception, so as to prevent the escape of rain water. The land is ploughed and harrowed, and the earth worked up into stiff mud. It is then left alone for ten or twelve days, to allow the grass and weeds to rot and manure the soil. After the land has been again repeatedly ploughed to about nine inches in depth, the transplanting takes place. For some days afterwards, the young plants appear almost withered, and turn yellow, but they soon recover. The *taluyá* plants are more hardy than the *neoyachá* ones, and do not die so easily when submerged. The former will live under water up to twenty-five days, but the latter are sure to die if they are covered for ten or twelve days. The early or *taluyá* crop is reaped in December and January, and the late crop in January and February. They are both reaped in the same manner as the *áus* crop, the ears and upper portion of the stem being cut off, while the remainder of the stalk is allowed to remain in the ground.

The following are the names of seventy-six varieties of *áman* or *haimanti* rice grown in Kuch Behar:—(1) *Chandrá-bhog* or *payrá*

chandrá, (2) *katari-bhog*, (3) *keyoá-bhog*, (4) *binnaphul-bhog*, (5) *tulsí-bhog*, (6) *báni-bhog*, (7) *jagannáth-bhog;* the cultivation of this description of rice has almost entirely died out. (8) *Mahes-bhog*, (9) *dál-bhog*, (10) *ukni-bhog* or *rukmini-bhog*, (11) *rachul-bhog*, (12) *khirsá-bhog*, (13) *kumar-bhog*, (14) *dalrám-bhog*, (15) *chinchakrá-bhog*, (16) *gundári-bhog*, (17) *dudhpakri*, (18) *subarna jasoyá*, (19) *chhotá jasoyá*, (20) *bar-lairá* or *hatír dánt*, (21) *chhotá ura*, (22) *bara jasoyá*, (23) *mánsingá* or the red paddy, (24) *dudher sar* or *kálá demá*, (25) *chhotá gánjiyá*, (26) *bara gánjiyá*, (27) *pán sáil*, (28) *narikel-jhopá* (29) *syámrás*, (30) *chhota phal pákri*, (31) *bar pánáti*, (32) *chhotá pánáti*, (33) *bar phal pákri*, (34) *kánáibansí*, (35) *buribanni*, (36) *katisáil*, *kártik-sáil*, or *neulá*, (37) *khángár-máo*, (38) *dhála bati*, (39) *lalbati*, *marich bhál-chati*, or *sindur khatayábati*, (40) *kálábati*, (41) *chhotá dhepa*, (42) *bent*, (43) *haldijám*, (44) *bángál-dári*, (45) *lohádáng*, (46) *báns bhangá*, (47) *dangábanni*, (48) *phul gánijá*, (49) *bagá jhul*, (50) *sáil-dhepá*, (51) *singra*, (52) *jal dhepá*, (53) *chhotá chapá kari*, (54) *amlá*, (55) *chemsi*, (56) *purpi*, (57) *jangirá*, (58) *bogá;* this description of rice is eaten uncooked, and only requires to be steeped in cold water for a short time to soften it. (59) *Amjhuki*, (60) *boyá-pákri*, (61) *almá kásár*, (62) *kesbabuchi*, (63) *kadbachi*, (64) *japebachi*, (65) *gusta-bibachi*, (66) *seoráj*, (67) *kákuyá*, (68) *kachdálá*, (69) *gariyá*, (70) *chikiyakabanni*, (71) *asambárá*, (72) *tárápákri*, (73) *kalbanni*, (74) *gotamguri*, (75) *muriyá-bachi*, and (76) *payará jasoyá*.

No improvements seem to have taken place in the quality of the rice grown in Kuch Behar; but during the last few years there has been a very considerable extension of rice cultivation, and it is said that the area now under this cereal is double what it was twenty years ago.

The names of rice in its various stages are as follow :—Seed rice is known as *bij dhán;* seed plants, *bichhan;* when transplanted, *roá;* when ripe and unhusked, *dhán;* and when husked, *chául*. When speaking of husked rice or *chául*, the word is always used with either the prefix *átap* or *ushná*, according to whether it was husked before or after boiling.

The various preparations made from rice are the following:—*Muri*, rice boiled and afterwards parched; sold at about 2 *ánnás* per *ser*, or three halfpence a pound. *Khái*, paddy parched and then husked; sold at the same rate as the preceding. *Chirá*, paddy half boiled, then pounded, and afterwards parched and husked; sold at 1½ *ánnás* per *ser*, or a fraction over a penny a pound. *Chál chirá*, husked

rice soaked in water, then fried and pounded; price 2 *ánnás* per *ser*, or three halfpence a pound. *Moá*, balls made of either *murí* or *khái* mixed with molasses; price 2½ *ánnás* per *ser*, or a penny three farthings a pound. There are two distilleries in the State for the purpose of manufacturing spirit from rice. The rice is cooked, and mixed with a decoction made from the roots of certain herbs; cold water is then added to the rice, which is placed in large earthen vessels, and allowed to ferment for two or three days; it is then distilled into spirits and called *sharab*. This spirit sells at from 8 *ánnás* to Rs. 1. 4 per *ser*, or from 9d. to 1s. 8d. a quart, according to its strength and quality.

OTHER CROPS, ETC.—Wheat is cultivated in Kuch Behar to some extent; it is sown broadcast in October and November, and reaped about May, but the grain is of a very inferior quality; it is grown on high land. Among pulses, *musurí* (Cicer lens) and *khesárí* (Lathyrus sativus) are sown broadcast in October and November, and cut in March and April. Indian corn is cultivated only to a very small extent. Jute is very extensively grown in the western portion of the State; it is sown broadcast in April and May, and reaped in September and October. When the plants are about six inches high, the crop is weeded out, the plants that are removed being used as food. Mustard-seed is sown broadcast in October and November, and reaped in January and February; the young leaves are also used as food.

Tobacco is very largely cultivated, especially in the eastern portion of the State, where it forms one of the staple crops. The following brief account of its cultivation is abbreviated from a printed lecture by Babu Rám Chandra Ghosh, which was originally delivered at the Kuch Behar Hitáishiní Sabhá. In June or July the seed is sown in high land, well ploughed and well manured. Until the plants reach about three inches high, the land is moderately irrigated every afternoon, after which it is only watered occasionally. Some cultivators build covered enclosures of thatch over the plants, to protect them from the violence of the rains. By the time the young plants are nine inches high, they are ready for transplanting. To prepare the land for their reception, it is well manured from April to September, when it is repeatedly ploughed and harrowed, and the field marked off into small squares. The transplanting takes place about the end of September, when one plant is placed at each of the angles of these squares. About the

following March or April, the leaves are fit for gathering; after being exposed in the sun for one day, they are stored in a dark room. In a month or six weeks afterwards, the leaves are bound together into bundles, and are ready for sale.

'Bamboos,' says Captain Lewin, 'grow extensively all over the country, and form the fuel supply of the people, besides being used largely in the building of their houses, fences, etc. Trees as a rule are scarce, but much has been done of late years, by forming plantations of valuable timber trees, to provide for a future supply.'

AREA, OUT-TURN OF CROPS, ETC.—According to the Surveyor-General in January 1876, the total area of Kuch Behar State is 1291·83 square miles. The Deputy-Commissioner, however, returned it in 1871 at 832,129 acres, or 1300·20 square miles. Of this latter total it is estimated that about 645,951 acres, or 1009·29 square miles, are under cultivation; rivers, streams, tanks, swamps, etc. take up about 61,071 acres, or 95·42 square miles; while the remaining 125,107 acres, or 195·48 square miles, are jungle. The Deputy-Commissioner is of opinion that about three-fourths of the jungle is capable of being brought under the plough. The comparative acreage under the different crops is roughly estimated as follows:—Rice takes about three-fourths of the cultivated area; house and garden lands, one-sixteenth; jute and tobacco, one-sixteenth; mustard-seed and other crops, one-eighth.

A fair out-turn for first-class rice land would be from 8 to 10 *maunds* of paddy or unhusked rice per *bighá*, or from 17½ to 22 hundredweights an acre; and for land of a worse class from 4 to 6 *maunds* per *bighá*, or from 8¾ to 13 hundredweights an acre. The paddy is worth from 12 *ánnás* to R. 1 per *maund*, or from 2s. to 2s. 8d. a hundredweight; the straw will fetch from 12 *ánnás* to R. 1 per *bighá*, or from 4s. 6d. to 6s. an acre. The mean value of the produce of a *bighá* of the best quality of land is about Rs. 8. 12, or £2, 12s. 6d. an acre; and for a worse description of soil, about Rs. 5. 4, or £1, 11s. 6d. an acre. Sometimes two crops of rice, one of *áus* and one of *áman*, are obtained from the same land during the year; sometimes also pulses are sown on *áman* rice land in October or November, shortly before the winter rice harvest, the pulses growing up after the rice has been cut. *Chirá*, a species of millet (Panicum milaceum), and *káon* are also occasionally sown after the reaping of the *áman* crop; and *áus* rice is often grown as a second crop on land from which a crop of mustard-seed has been already taken. The value of these

second crops varies from Rs. 2 to Rs. 5 per *bighá*, or 12s. to 30s. an acre; thus raising the mean value of the out-turn of the best description of land above mentioned to Rs. 12. 4 per *bighá*, or £3, 13s. 6d. an acre, and that of the second description to Rs. 8. 12 per *bighá*, or £2, 12s. 6d. an acre.

CONDITION OF THE CULTIVATING CLASSES.—It is very seldom that a large husbandman (*jótdár*), who holds his land direct from the State, cultivates himself all the land in his holding. The *chukánidár*, again, or sub-tenant, generally has *ádhiárs* under him, who cultivate the land, and give him a half-share of the produce as rent in kind; or else he gives the land out to *dar-chukánidárs*, who pay him rent and retain the produce. The extent of the holding, therefore, does not represent the quantity of land actually cultivated by the *jótdár* or *chukánidár*. A cultivator's holding of more than 5 *bis* or 64 standard *bighás* (21 acres) in extent would be considered a very large one; while one measuring only 1 *bis*, or 12 *bighás* 16 *káthás* (4 acres), would be a very small one. A small farm of about 15 *bighás*, or 6 acres, may be regarded as a fair-sized comfortable holding for a peasant. It is stated in the section on Land Tenures, that the statistics obtained in the course of the Settlement in *parganá* Mekhlíganj show that the average size of all the holdings, from *jótdár* to *ádhiár*, in that Fiscal Division is 18 *bighás*, or 6 acres. A farm of this extent would make its holder as well off as a respectable retail shopkeeper; and he could live as well as on a monthly wage of Rs. 8 (16s.). A man in receipt of such wages has to purchase his rice in the *bázár*, but the husbandman grows it for himself, as well as nearly all other necessary articles of food. He has not generally even to buy firewood, and can keep a cow without difficulty. A single pair of bullocks cannot plough more than 15 *bighás* or five acres of land. The peasantry, as a class, are not now generally in debt, and have very much bettered their condition of late years. The rates of rent payable by each class of tenants are fixed by the Settlement. The *jótdár* pays his assessment direct to the State, and is only permitted to receive from the *chukánidár* a certain fixed percentage above that assessment; in the same way, each successive under-tenant is only allowed to exact fixed rates. 'As a consequence,' says the Assistant-Commissioner in charge of the Settlement, 'the under-tenants in the State of Kuch Behar are in a much better position than men of the same class in Bengal. They are a contented and well-to-do class.'

The Rájá is the sole owner of the soil; and, therefore, there are no cases in Kuch Behar of small proprietors, who own, occupy, or cultivate their hereditary lands, without either a superior landlord above them, or a sub-tenant or labourer of any sort under them.

The Deputy-Commissioner estimates that about Rs. 12 (£1, 4s. od.) a month would comfortably support a middling-sized cultivator's household, in the rural parts of the State.

THE DOMESTIC ANIMALS of Kuch Behar are ponies, buffaloes, cattle, goats, pigs, dogs, cats, etc. Oxen are the most used for agriculture, but cows are also sometimes put to the plough. Ponies, cattle, a few buffaloes, goats, sheep, and pigs are reared for sale. The value of an ordinary cow is from Rs. 10 (£1) to Rs. 20 (£2); of a pair of ploughing oxen, from Rs. 12 (£1, 4s. od.) to Rs. 20 (£2); of a pair of oxen for carrying loads, or for cart work, from Rs. 30 (£3) to Rs. 50 (£5); imported oxen are much dearer, and are worth from Rs. 50 (£5) to Rs. 100 (£10) a pair; a pair of buffaloes can be purchased for Rs. 50 (£5); a score of sheep, from Rs. 30 (£3) to Rs. 40 (£4); a score of kids six months old, from Rs. 20 (£2) to Rs. 30 (£3); and a score of full-grown pigs, from Rs. 100 (£10) to Rs. 160 (£16).

AGRICULTURAL IMPLEMENTS.—The names of the various agricultural implements used in the State, and their respective uses, are as follows:—(1) *Nángal*, a wooden plough; (2) *phal*, a ploughshare; (3) *kursái*, a mallet for breaking up the clods of earth; (4) *joyál*, a yoke for the plough oxen; (5) *mái*, a sort of harrow for levelling the furrows after ploughing, and collecting the weeds; (6) *bidá*, a large wooden rake with teeth made of sharpened bamboos, used for weeding; it is drawn across the fields by a pair of oxen; (7) *hat chhení*, a rake made in the same manner as the above, but lighter and smaller, and drawn by the hand; (8) *pasun*, an implement used for weeding, called *khurpá* in the Districts of Bengal; (9) *kodálí*, a hoe; (10) *káchi*, a sickle; (11) *kuthár*, an axe for cutting down trees, jungle, etc.; (12) *dáo*, a sort of hand-bill. One pair of oxen and the several implements mentioned above are required to cultivate what is technically known as 'a plough' of land, which is equivalent to 13 *bighás* or a little more than four acres. The cost of the implements would be from Rs. 3 (6s.) to Rs. 4 (8s.); and of the ploughing oxen from Rs. 12 (£1, 4s. od.) to Rs. 20 (£2).

WAGES AND PRICES.—There are very few regular coolies and agricultural day-labourers in Kuch Behar, except those that come

from other Districts every year in search of work, mostly Dhángars and men from Sháhábád. Many of the smaller cultivators also, when not employed in tilling their own fields, occasionally hire themselves out as day-labourers. Wages have more than trebled within the last twenty years, as appears from the following statement, showing the rate of wages paid for different descriptions of labour at three various times :—In 1854, ordinary labourers were paid at the rate of Rs. 1. 8 (3s.) a month; in 1860, the rate had increased to Rs. 3 (6s.), and in 1871, to Rs. 7 (14s.) per month. Agricultural day-labourers received Rs. 2 (4s.) a month as wages in 1854, Rs. 3 (6s.) in 1860, and Rs. 5 (10s.) a month in 1871. Bricklayers, who received Rs. 2. 8. 0 (5s.) a month in 1854, earned Rs. 4 (8s.) in 1860, and Rs. 8 (16s.) a month in 1870. Blacksmiths' wages have increased from Rs. 4 (8s.) a month in 1860 to Rs. 8 (16s.) a month in 1870; and carpenters' wages from Rs. 4 (8s.) to Rs. 7 (14s.) in the same interval. The last three named rates, however, apply only to the local artisans. Really skilled bricklayers, carpenters, and blacksmiths, imported from other parts of the country, would earn two or three times those wages.

Although wages have increased to such an extraordinary extent in so short a time, the price of food-grains would seem to be at present less than in 1860. That is the only early year for which I have the prices, and I am unable to state whether these are fair average rates, or whether there was any particular local circumstance in that year to raise them to an exceptional height. The following table shows also the highest prices reached in 1866, the year of the Orissa famine :—

TABLE SHOWING THE PRICES OF FOOD STUFFS IN KUCH BEHAR STATE FOR 1859-60 AND 1870-71, WITH THE MAXIMUM PRICE IN 1866.

	1859-60.		1870-71.		1866.	
					Maximum price	
	Per *maund*.	Per cwt.	Per *maund*.	Per cwt.	Per *maund*	Per cwt.
	R a.	*s d*	*R. a. R. a*	*s. d. s. d.*	*R. a*	*s d*
Best cleaned rice, . .	3 4	8 10	2 4 to 3 0	6 1 to 8 2	6 0	16 4
Common rice, . . .	1 12	4 9	1 0 to 1 8	2 8 to 4 1	4 0	10 11
Best paddy, ...	2 2	5 10	0 12 to 1 4	2 0 to 3 6	4 12	12 11
Common paddy, . .	1 2	3 0	0 8 to 0 12	1 4 to 2 0	3 4	8 10
Wheat, ...	1 8	4 1	1 8	4 1	3 8	9 6
Molasses, ...	5 0	13 8	6 0	16 4	7 0	19 1

WEIGHTS AND MEASURES.—Weights are seldom used by the mass of the people, who sell nearly all their produce by measurement; but the shopkeepers use the ordinary *ser* of 80 *tolá* weight, equivalent to 2 lbs. 0 oz. 14 drs. avoirdupois, and sometimes also the *káchá ser* of 60 *tolá*, equal to 1 lb. 8 oz. 10½ drs. The *tálá* is much used as a measure of quantity; it is a round basket of the diameter of ten fingers:—24 *tálá* make 1 *man* or *maund;* from 7 to 8 *tálá* = 1 *don;* 20 *don* = 1 *bis* = 5½ *maunds;* 16 *bis* = 1 *pantí* = 88 *maunds.* Measures of time are as follow:—60 *pal* = 1 *dand* or 24 minutes; 7½ *dand* = 1 *prahar,* or three hours; 2 *prahar* = 1 *belá,* or 6 hours; 4 *belá* = 1 day and night of twenty-four hours. The local unit of square measure is the *bis,* which is equivalent to 12 standard *bighás* 16 *káthás,* or 4 acres 1 rood; but the standard *bighá,* equal to 14,400 square feet, or about ⅓ of an acre, is gradually coming into use, and has been adopted for calculations throughout this Statistical Account. The people have a very vague idea of distance. They use the word *kos* (signifying a Bengalí measure of about two miles); but the general way of expressing distance is to say that such a place is one *prahar* off, or three hours' walk, and so on. For short distances they say that a place is so many fields off, or so many *rásis* distant, a *rási* being 120 feet.

LANDLESS DAY-LABOURERS.—There appears to be no tendency towards the growth of a distinct class of day-labourers in Kuch Behar, neither owning nor renting any lands. Nearly every man in the State cultivates his small patch of ground. The number of *ádhiárs* referred to above, who cultivate the fields of others in consideration of receiving a half-share of the crop, is decreasing; but large numbers of labourers come yearly in the cold season from the Behar Districts, especially from Sháhábád, as well as Dhángars from Chutiá Nágpur. These men are mostly employed in making roads, tanks, etc.

Women have to work hard. They, as well as children, are extensively employed in all sorts of field work; but they do not work for others on hire. Ploughing is almost the only field work that women do not perform.

WASTE LANDS.—There are about 125,107 acres of spare land available in Kuch Behar, principally in the north-eastern portion of the State; and the present Deputy-Commissioner is of opinion that tenures for the cultivation of these waste lands should be offered on terms favourable to cultivators.

LAND TENURES.—The land tenures prevailing in Kuch Behar State are of a less complicated character than those generally found in Bengal; and it is said that they are more favourable to all the various parties interested in the soil, as the rights of each are strictly defined either by law or custom, and easily ascertained. The following paragraphs are quoted, almost verbatim, from a report on the land tenures of the State, prepared by Mr. W. O. A. Beckett, Assistant-Commissioner in charge of the Kuch Behar Settlement, dated 12th December 1874:—

REVENUE-PAYING TENURES.—The Rájá is the owner of the soil, and stands much in the same relation to the *jótdárs* as does a *zamíndár* in Lower Bengal to his *rayats*. The different classes of tenants found in the State are as follow:—(1) *Jótdárs*, (2) *chukánidárs*, (3) *dar-chukánidárs*, (4) *daradar-chukánidárs*, (5) *tasia-chukánidárs*, (6) *ádhiárs*.

'The *jótdárs*.—Persons holding revenue-paying land immediately under the Rájá are called *jótdárs* or proprietors of *jóts*. A *jót* is hereditary, transferable, and divisible by the customary law of the country. The State has always recognised the right of ownership, subject to the payment of revenue at the prevailing rates, although there is no written code extant from which such right could be proved. The rent payable by *jótdárs* is liable to enhancement; but the present Settlement is fixed for twelve years, that is, up to three years after the coming of age of the present Rájá. This period was fixed by Government letter, dated 25th June 1867.

'The *chukánidár* is the immediate under-tenant of the *jótdár*, a holder of a certain portion of the *jót* or farm; such holding being known as a *chukání*. A *chukání* is a saleable under-tenure, but the consent of the *jótdár* must be obtained to the transfer. It cannot be extinguished, unless the *jótdár* himself purchase it and hold the land *khás*, or in his own hands. It may, however, be attached and sold in execution of a decree of the Civil or Revenue Courts, without the assent of the *jótdár*. A *chukánidár* has rights of occupancy; his under-tenure is also hereditary like a *jót*, and divisible. He pays to the *jótdár*, as rent, a sum not exceeding 25 per cent. over the rates that the *jótdár* pays to the State. The quantity of land held by each *chukánidár*, together with the maximum rent payable by him to the *jótdár*, has been entered in the *terij*, or rent-roll of the State, a copy of which is given to each *chukánidár*, and also to his sub-tenants.

'A *dar-chukánidár* is the under-tenant of a *chukánidár*. This under-tenure is transferable, with the consent of the *chukánidár*, and also hereditary. A *dar-chukánidár* has, moreover, a right of occupancy; in fact, the right of ejectment, save in default of payment of rent, has never been recognised in Kuch Behar. A *dar-chukánidár* pays 50 per cent. over the *jótdár's* rates, as rent to his *chukánidár*.

'A *daradar-chukánidár* is an under-tenant of a *dar-chukánidár*. He has the same rights as a *dar-chukánidár;* the rate of rent payable being 75 per cent. over the *jótdár's* assessment. There are, however, comparatively few of this class of tenures in the State. In still fewer cases *daradár-chukánidárs* have again under-tenants of their own, styled *tasia-chukánidárs;* but this is a very rare occurrence.

'It will be noticed that, while in Bengal, under the rulings of the High Court, only one class of holders under a *zamíndár* can have occupancy rights, all classes of under-tenants in Kuch Behar have these rights; and, moreover, each man knows accurately from a document, furnished by the Settlement Department, the exact maximum which he can be called upon to pay as rent, thus preventing any illegal cesses or other exactions being required from him. The under-tenant, therefore, in Kuch Behar is comparatively in a better position than men of the same class in Bengal. As a rule, the agriculturists of the State are a happy, contented, well-to-do class.

'An *ádhiár* or *prajá* is a person who cultivates land on the condition that he gets half the produce of the crop; he is, in fact, a hired labourer, paid in kind. The *ádhiárs* hitherto have had no rights whatever in the soil; but Sir G. Campbell, when Lieutenant-Governor of Bengal, in a letter dated 4th October 1872, ordered that *ádhiárs,* who cultivate with their own cattle for twelve consecutive years, should gain occupancy rights in their fields. Each class of tenants usually cultivates some of his land through *ádhiárs;* thus there are *ádhiárs* under *chukánidárs* and *dár-chukánidárs,* as well as under *jótdárs.*'

The following particulars of land held by these different classes of tenants in *parganá* Mekhlíganj, obtained in the course of the present Settlement, will show more clearly how lands are held in Kuch Behar:—

Area of land held.	*bighás.*	*káthás.*	Acres.	roods.	poles.
By *jótdárs* in their own hands, . . .	41,286	18	13,648	2	10
By *ádhiárs* under *jótdárs*, ...	35,615	16	11,773	3	12
By *chukánidárs* in their own hands, . .	44,309	10	14,647	3	4
By *ádhiárs* under *chukánidárs*, . . .	19,958	10	6,597	3	16
By *dar-chukánidárs* in their own hands, .	17,138	9	5,665	2	17
By *ádhiárs* under *dar-chukánidárs*, . .	4,871	9	1,610	1	24
By *daradar-chukánidárs* in their own hands,	2,292	13	757	3	24
By *ádhiárs* under *daradar-chukánidárs*, .	727	2	240	1	18
By *tasia chukánidárs* in their own hands, .	288	19	95	2	3
By *ádhiárs* under *tasia-chukánidárs*, . .	10	16	3	2	11
Total, . .	166,500	2	55,041	1	19

The number of tenants under the *jótdárs* in *parganá* Mekhlíganj, with the average size of their respective holdings, is returned as follows:—Number of *chukánidárs*, 2624; average size of holding, 17 *bighás*, or 5½ acres: *dar-chukánidárs*, 814; size of holding, 21 *bighás*, or 7 acres: *daradar-chukánidárs*, 120; size of holding, 19 *bighás*, or 6 acres: *tasia-chukánidárs*, 12; size of holding, 24 *bighás*, or 8 acres: *ádhiárs*, 4711; size of holding, 13 *bighás*, or 4 acres. The number of *jótdárs* is not given; but the average size of a *jót* is stated to be 237 *bighás*, or 79 acres; of which only about one-fourth (58½ *bighás*, or 19 acres) is held by the *jótdár* in his own hands. From these figures it may be inferred that the total number of *jótdárs* in *parganá* Mekhlíganj is about 700. It would appear, therefore, that the average size of all the holdings of whatever class, in this *parganá*, is 18 *bighás*, or 6 acres. The amount held by *jótdárs* in their own hands is about 25 per cent. of the total area; that held by *chukánidárs*, 27 per cent.; by their sub-tenants, 12 per cent.; by *ádhiárs* under all classes of tenants, 37 per cent.

'The Settlement has been made with the *jótdárs*, who pay their rent direct to the State officers, and to whom *pattás* have been issued, in exchange for *kabulyats*; but, as already stated, a copy of the *terij*, or rent-roll, has been given to each under-tenant, specifying the area of his holding, its incidents, and the rent payable by him. Consequently, certainty and fixity of rent are thus given to all under-tenants for the period of the present Settlement. A clause has also been inserted in the *jótdárs' pattás*, binding them to abide by the *terij* entries given to the *chukánidárs;* and also a further clause, binding them to insert in the *pattás*, which they may give to *chukánidárs*, a stipulation to the same effect on behalf of their *dar-chukánidárs*.

'THE RENT-FREE TENURES in the State of Kuch Behar are as follow:—*Bráhmottar* lands, given to Bráhmans for their support; when made by a reigning Rájá, such grants are hereditary and transferable. They are of a personal nature, in contradistinction to *debottar* grants, which are made for the support of an idol.

'*Mukarrarí* grants are lands given at a fixed rate, free from all *abwábs*, with the exception of *báttá*. In Kuch Behar, there are two kinds of *mukarrarí* grants. In some deeds, the Rájás have entered a special clause giving hereditary rights, and in other deeds no such clause is inserted. In the latter, the special condition of the grant lapses on the death of the original grantee, and his heirs have no claim to hold the land at a fixed rent. *Mukarraris* with a special clause giving hereditary rights are not liable to enhancement, and can be held from father to son; but on failure of heirs they escheat to the State.

'*Petbhátá* lands are rent-free holdings, generally given by a Rájá for the maintenance of his relatives during their lives. A *petbhátá* grant lapses at the death of the original grantee, and his heirs must apply to the Rájá for a renewal. If no fresh grant is given, the heirs are ordinarily, but not necessarily, allowed to hold the land as a *jót*, paying rent at the prevailing rates like any other *jótdár*. While the land is held as *petbhátá*, it is not transferable.

'*Bakshish.*—This is only another name for ordinary *lákhiráj* grants. They are not confined to any particular class, and are hereditary and transferable. All *lákhiráj* grants escheat to the State on failure of heirs.

'*Debottar* grants are lands given for the support of an idol; they cannot be sold or alienated in any way. In Kuch Behar there are two kinds of such grants. (1) State *debottars*, or grants made to idols which are supported and looked after directly by the officers of the State, the necessary *pujás*, or acts of worship, being performed under the superintendence of the State officers. There are, however, some idols which belong to the Rájá, but are managed by *sebáits*, who are not directly under the orders of the State officer, who is called the *Dharmádhayka*. If the *sebáit* of a State *debottar* dies, another is appointed by the State, generally the heir (if qualified) of the former *sebáit*, but not necessarily so. (2) Besides State *debottars*, there are what may be called private *debottars*. For instance, a Bráhman asks the reigning Rájá for a *debottar* grant to support his own idol; and if a grant is given, the grantee is bound

to see that the necessary *pujás* are made, and as long as these are regularly performed, the State does not interfere. In practice, the *sebáit*ship is hereditary, but it is not necessarily so.

'*Pirpál* resembles *debottar*, being land granted to Muhammadans for the support of a *pír* or saint, just as a *debottar* is given to Hindus for the support of an idol.

'*Jágírs*, or service tenures. Persons holding *jágírs* are bound to give certain defined personal services for the land they hold. If they fail to do so, or are inefficient, or if their services are no longer required, the land is resumed. *Jágír* lands are consequently not saleable or transferable, and a *jágírdár* cannot create any subordinate tenures binding on the State. Qualified heirs ordinarily inherit, but the State is not bound to accept the services of the heirs.'

RATES OF RENT.—The rent payable by each class of tenants is, as already stated, practically fixed by the Government assessment on the *jótdár*. The following table shows the rules of *jótdárí* rent, which are said to have been settled by Mr. Ahmuty, Collector of Rangpur in the beginning of the present century. In addition to the old rates, *kartanís* or cesses of various kinds have been imposed, averaging about 4 *ánnás* 8 *pies* in the rupee (3½d. in the shilling); and the modern rates, which include these *kartanís*, are also given in the table. The old rates were determined according to the *bis*, the local unit of square measure, equal to 12 *bighás* 16 *káthás*; but all have been reduced to terms of the standard *bighá* and English acre :—

STATEMENT SHOWING OLD RATES OF RENT PAID BY THE JOTDARS IN KUCH BEHAR STATE, TOGETHER WITH ADDITIONAL MODERN CESSES.

Quality of Land.	Old Rate of Rent.						Rate of Rent with Modern Cesses					
	Per *bis*			Per *bigha*			Per acre		Per *bighá*			Per acre	
	R	*a*	*p.*	*R*	*a*	*p*	*s*	*d*	*R*	*a*	*p*	*s*	*d.*
Awál, or first class,	6	12	9	0	8	6	3	2	0	12	2	4	7
Doem, or second class,	5	1	7	0	6	4	2	4	0	9	2	3	5
Soem, or third class,	4	4	0	0	5	3	2	0	0	7	7	2	10
Chaharam, or fourth class,	3	6	4	0	4	3	1	7	0	6	1	2	3
Bans, or bamboo land,	10	3	2	0	12	9	4	9	1	2	3	6	10
Son, or grass land,	6	12	9	0	8	6	3	2	0	12	2	4	7
Láik pátit, or cultivable waste,	2	8	9	0	3	2	1	2	0	4	6	1	8
Nij bástu, or homestead land,	27	3	2	2	2	0	12	9	3	0	8	18	3
Bázi bagán, or garden land,	27	3	2	2	2	0	12	9	3	0	8	18	3
Supari bagán, or betel-nut land,	54	6	4	4	4	0	25	6	6	1	5	36	6
Prajá bastu, or homestead land of other tenants,	20	6	4	1	9	6	9	7	2	4	6	13	8

In the Settlement made a few years ago of *parganá* Rohanganj, the following rates of rent were fixed :—*Awál*, first-class land, 12 *ánnás* per *bighá*, or 4s. 6d. an acre ; *doem*, or second-class land, 10 *ánnás* per *bighá*, or 3s. 9d. an acre ; *soem*, or third-class land, 8 *ánnás* per *bighá*, or 3s. an acre ; *chaharam*, or fourth-class land, 6 *ánnás* per *bighá*, or 2s. 3d. an acre ; *báns*, or bamboo land, Rs. 1. 2 per *bighá*, or 6s. 9d. an acre ; *son*, or grass land, 6 *ánnás* per *bighá*, or 2s. 3d. an acre ; *láik patit*, or fallow land, 4 *ánnás* per *bighá*, or 1s. 6d. an acre ; *bástu*, or homestead land, Rs. 3 per *bighá*, or 18s. an acre ; *ud-bástu*, or land next the homestead, Rs. 2 per *bighá*, or 12s. an acre; garden land, Rs. 3 per *bighá*, or 18s. an acre ; *supárí*, or betel-nut land, Rs. 6 per *bighá*, or 36s. an acre. The Deputy-Commissioner, who has furnished the above figures for *parganá* Rohanganj, states that, as a matter of fact, these rates were never enforced, but that, through some mistake, a deduction of 40 per cent. was allowed to the *jótdárs*.

It is important to recollect that all the rates of rent already given apply only to the *jótdárs*, who are but rarely the actual cultivators of the soil. Their sub-tenants, the *chukánidárs*, who correspond more nearly to the *rayats* of Bengal, used, before the present Settlement, to pay what was called a *haridarí* or average rate. This was fixed on the *bis*, equivalent to 12 *bighás* 16 *káthás*, or 4 acres 1 rood, including land of all qualities ; it was not uniform, but varied from Rs. 3 to Rs. 20 per *bis*, according to the situation of the holding.

The Settlement which has lately been carried out by Mr. W. O. A. Beckett, Assistant-Commissioner, directly fixes the rates of rent payable by all classes of tenants. This Settlement will last for a period of 12 years, expiring just three years after the present Rájá [illegible] majority. The *jótdár* pays direct to the State, at rates [illegible]—For *bástu*, *ud-bástu*, garden land, and betel-nut [illegible] *bighá*, or 15s. an acre ; for bamboo land, Rs. 1. 2 per *bigh[illegible]* od. an acre ; for all other cultivated lands, 8 *ánnás* per *bighá*, or [illegible] ; for *bíls* or marshes, included in a *jót* of 2 *bighás* or less [illegible], 8 *ánnás* per *bighá*, or 3s. an acre ; for fallow land an[illegible] *ánná* per *bighá*, or 4½d. an acre. These rates, which s[illegible] avourable to the tenants, were sanctioned, after a volumin[illegible] pondence, by the Lieutenant-Governor of Bengal, in a let[illegible] 4th October 1872. As has been already mentioned, the [illegible] stringently prohibited from taking more

than an increase of 25 per cent. on these rates from the *chukánidárs;* and the same proportional increase is allowed to each successive under-tenant.

MANURE, IRRIGATION, ETC.—Almost every peasant has cattle of his own, and uses the dung and litter as manure for his tobacco, sugar-cane, jute, mustard-seed, betel-nut, and *pán*, as far as his own supply goes. Rice fields, however, are not generally manured. Manure is never bought; those who have many cattle use a great deal, and those who have fewer use less. *Khol*, or oil-cake, is also sometimes used as a manure. From 60 to 80 *maunds* per *bighá*, or from 6½ to 9 tons an acre, of cow litter is considered to be a liberal supply of manure for an acre of tobacco land.

Irrigation is not common in Kuch Behar. Wells are made either by sinking baked earthen rings, about two feet in diameter, in the earth on the top of one another, or else the walls are protected by a square frame-work of *sál* timber. Sometimes a well is constructed by digging a mere hole in the ground, without any protection to the sides. The cost of a well of the first description is about Rs. 6 (12s.) or Rs. 7 (14s.); and of one with a wooden frame-work, about Rs. 70 (£7) to Rs. 80 (£8). The cost of the third description of well is merely the labour expended in sinking the hole.

It is customary occasionally to allow lands to remain fallow for a year or two; but the principle of rotation of crops is not practised.

NATURAL CALAMITIES.—Kuch Behar cannot be said to be exceptionally liable to blights, floods, or drought, although each of these calamities do sometimes occur. About the middle of November 1863, a flight of locusts passed over the State, doing a great deal of mischief to the tobacco and mustard-seed crop; but as they left the rice untouched, the injury they inflicted was not deeply felt. They came from the west and travelled eastwards. No remedial measures are adopted against this or any other description of blight.

The State suffered much from heavy floods in 1822 and 1842, when the crops were seriously damaged, many cattle lost, and a few deaths by drowning also occurred. In 187 there was also a slight flood. Kuch Behar is intersected by numerous rivers and streams; and when there are heavy rains in the Bhután hills, these overflow, and cause inundations. The floods are not due to excessive local rainfall. There are no embankments in the State;

and the Deputy-Commissioner is of opinion that it would be impossible to embank the large rivers, both on account of the great expense, and their liability to change their courses.

A very heavy drought, caused by absence of local rainfall, occurred in 1854, which seriously affected the prosperity of the people. It resulted in a general failure of the rice crops, and a partial famine. The Rájá of the State was at that time a minor, in the Court of Wards Institution at Calcutta; but the chief minister of the State procured large quantities of grain from Sirájganj and other places, and sold it at cost price to the people. For about three months boats were continually coming in with rice, which was distributed over the country. The Deputy-Commissioner states that there is no demand for canals or other irrigation works in the State, as droughts are of exceedingly rare occurrence.

Kuch Behar is a flat level plain, and, consequently, there are no compensating influences which would come into play in cases of drought or flooding.

FAMINES.—The maximum price of rice during the famine of 1866-6[illegible] was Rs. 6 per *maund*, or 16s. 4½d. a hundredweight, and of unhusked rice, or paddy, Rs. 4. 12 per *maund*, or 12s. 11d. a hundredweight; the local prices have now returned to what used to be considered their ordinary rates before the famine. The distress in 1866-67 in Kuch Behar did not amount to absolute famine, for it was not found necessary for the State to grant relief. The calamity of 1854 did amount to a famine, although the maximum prices which prevailed in that year were lower than those which were current in 1866-67. But in the latter year the people were in a much more prosperous condition, and could afford to pay a much higher rate. Kuch Behar shared with the neighbouring Districts in the suffering [illegible]ed in 1873-74 by the failure of the rains. On that occasion it [illegible]ecessary to expend more than 2 *lákhs* of rupees [illegible]f; this sum was taken out of the invested cap[illegible] cumulated during the minority of the present Rájá.

FAMINE [illegible]s.—The Deputy-Commissioner, writing before the experien[illegible]'3-74, states that it is not easy to determine what prices [illegible] termed famine rates. If the crops in Kuch Behar in any [illegible]re plentiful, and there was famine in the neighbouring [illegible] the price of grain would become very high, and yet the p[illegible]uld not be affected. On the other hand, if

the crops of the State were to fail, the price of the grain imported from the surrounding parts might not be excessive, and yet the people would feel it keenly. If the State had not had an average crop in 1866-67, the worst features of famine would have been experienced. However, speaking generally, the Deputy-Commissioner thinks that famine prices are reached when ordinary rice sells at Rs. 5 or Rs. 6 per *maund*, or 13s. 8d. to 16s. 4½d. a hundredweight. If the price of rice should be as high as Rs. 3 per *maund*, or 8s. 2d. a hundredweight, in January or February, soon after the winter harvest, he would consider it to be a warning of famine later in the year. Kuch Behar depends chiefly on the *áman* harvest. If a total loss of the *áus* crop took place, it would not be very much felt; but an entire failure of the *áman* harvest could not be compensated for by the *áus*, and would probably be followed by famine. The Deputy-Commissioner is of opinion that the existing roads, and the numerous rivers and streams, afford sufficient facilities for importation to prevent danger from the isolation of any particular part of the State in time of famine. Carts and pack-bullocks can travel all over the State in the cold weather, even in places where there are no roads.

Foreign and Absentee Proprietors.—There are no European proprietors in Kuch Behar, and only two Muhammadan revenue farmers, or *ijárádárs*, who pay a total annual revenue of £174. There are, however, a large number of Muhammadan *jótdárs*. A considerable proportion of the land is held by absentee proprietors, and almost all the officers of the State are foreigners from Lower Bengal.

Roads and Means of Communication.—The principal roads in the State of Kuch Behar are the following:—(1) A portion of the road leading from Dubrí, a Subdivisional town of Goálpárá District in Assam, situated on the banks of the Brahmaputra river, to Jalpáigurí. This road enters the State in the north-east corner from the Sankos river, and leads to Kuch Behar town, a distance of nineteen miles. It runs through the State for a further distance of twenty-six miles, as far as a place called Bálárhát; after traversing the Fiscal Division of Pátgrám in Jalpáigurí District, it again crosses a small portion of Kuch Behar State, a distance of three miles, in the neighbourhood of Chángrábándá. The total length of this road in the State is, therefore, forty-eight miles. (2) A road leading from Kuch Behar town to the military station of Baxá in the Western Dwárs, runs for

the first twelve miles through this State. (3) A road leads from Kuch Behar town to Rangpur, of which about twenty-four miles fall within the State; at the distance of fifteen miles from Kuch Behar, this road passes the Subdivisional Station of Dinhátá. These three roads are passable by carts all the year round, and are in a very fair state of repair. They are under the management of the Superintendent of Public Works employed by the State; and the average annual cost for their repair, etc. is about £800. There are several market villages upon the principal routes of traffic, but none of them have lately come into existence.

The Bengal Administration Report for 1874–75 contains the following paragraph on this subject:—'There is a small but effective Public Works Department, with a good native officer with practical training at the head. The State has now some 115 miles of unmetalled roads, with numerous good wooden bridges; and thousands of carts are now found where only tens and scores used to be seen. There are many streams and some boats, but water-carriage does not seem likely to play an important part in the traffic of Kuch Behar. The territory lies intermediate between two great navigable rivers, the Brahmaputra and the Tístá, and the cross roads are directed to meet the main starting-places for such navigation.'

In an earlier portion of the same Report, the Lieutenant-Governor suggests, among 'Railways to be arranged from local or provincial sources,' a line from Jalpáigurí on the Northern Bengal State Railway, *viâ* Kuch Behar, to meet extension towards Assam; fifty-five miles.

MANUFACTURES.—The people of Kuch Behar State are almost all agriculturists. The only articles manufactured by them which [illegible] are *endí* or *erí*, and *mekhlí* cloth. The *endí* is a coarse [illegible] the produce of silkworms fed on the castor-oil plant [illegible]nis), called by the natives *erí*. It is a strong and warm [illegible] about eighteen feet long by four in breadth sells at from Rs. [illegible]0 (from 12s. to £1), according to the quality of the textur[illegible] *mekhlí* is a coarse cloth made of jute, and used for screens, l[illegible]tc.; it takes its name from the subdivisional town of Mek[illegible]here it is largely manufactured. It is generally made in [illegible] of about seven feet long by one and three-quarters feet [illegible]th, each piece selling for from 12 *ánnás* to R. 1 (1s. 6d.[illegible])

An artisans' school has lately been established in the State. A Chinese carpenter has been brought from Calcutta, and professional blacksmiths, weavers, potters, and braziers have also been engaged, to teach their several trades. Apprentices who wish to learn receive a small stipend from the State for maintenance; and there are now several pupils in the school.

There is no regular manufacturing community in Kuch Behar; the few manufacturers to be found for the most part combine their trade with agriculture, and the latter becomes the chief occupation. There are several artisans, such as carpenters and masons, who have come from other Districts, and who are employed in the State Department of Public Works. The pay of a carpenter or mason varies from Rs. 7 to Rs. 25 (14s. to £2 10s. od.) a month, the lowest paid men being generally residents of the State. The people generally make their own cloth, mats, baskets, etc. The system of advancing money for manufacturing purposes does not exist. There are no cases of any manufactures having died out which were formerly carried on; but Captain Lewin states that the manufacture of home-spun cloth, described above, is being rapidly superseded by the importation of Manchester piece-goods.

COMMERCE, TRADE, ETC.—Nearly all the commerce of the State, except such as is carried on at the weekly markets, is in the hands of foreign merchants, chiefly Márwáris from Bikanír, who bring more energy and enterprise to the work than the Kuch Beharís usually possess. The chief exports from the State are tobacco, jute, mustard-seed, rice, and mustard-oil; and the principal imports are piece-goods, salt, brass, and copper utensils, sugar, molasses, pulses of sorts, spices, cocoa-nuts, betel-nuts, beads, dried fish, etc. The principal seats of commerce are the town of Kuch Behar, and the villages of Balrámpur, Chaorá, Gobráchhárá, Dírránganj, Chángrábándá, and Laukutí. The local trade is chiefly carried on by means of markets scattered over the State. The only fair in the year is the Godádhar *melá*, held on a certain day in the month of Chaitrá (May), at a place on the right bank of the Káljání river, about eleven miles from Kuch Behar town. It continues for three days. The only local manufactures which form an article of trade with other Districts are *endí* or *eri* cloth, *mekhlí* cloth, and mustard-oil. The crops of the District not only suffice for the local wants, but there is a large export of jute, tobacco, rice, and mustard-seed.

The native merchants estimate the exports at about £150,000 per annum, and the imports at £90,000 per annum, as follows:—Exports—tobacco, £70,000; jute, £40,000; mustard-seed and oil, £20,000; rice, £10,000; miscellaneous, £10,000: total value of exports, £150,000. Imports—cloth, £50,000; salt, £15,000; other articles, £25,000; total value of imports, £90,000. The balance of trade would thus be in favour of the State; and the Deputy-Commissioner, judging from the increased prosperity of the people, is of opinion that a slight accumulation of coin is going on.

River Trade Statistics.—Since September 1875, an accurate system of traffic registration has been in force on all the great waterways of Bengal; the returns thus received are published monthly in *The Statistical Reporter*. The two following tables, which have been compiled from that source, show (Table I.) the total exports from the State of Kuch Behar for the six months ending February 1876, and (Table II.) the total imports into the State during the same period.

Statistics of the River Traffic of Kuch Behar State for the Six Months ending February 1876. Table I. (Exports.)

Description of Goods.	September.	October.	November.	December.	January.	February.	Total.
Class I.	*mds.*	*mds.*	*mds.*	*mds.*	*mds.*	*mds.*	*mds.*
Wheat,	10	100	...	...	...	150	260
Pulses and gram,	...	6	...	...	...	...	602
Rice,	85	357	60	...	...	...	4,382
Paddy,	1,236	2,856	90	...	...	200	72,934
Jute,	...	4,094	9,663	16,551	17,298	25,328	775
Hides,	...	200	425	...	...	150	170
[illegible]ner and brass,	...	30	78	62	...	887	3,199
[illegible]	25	980	352	639	316	194	1,972
[illegible]	...	1,724	54	...	...	...	100
[illegible]nents,	...	...	...	100	...	...	300
[illegible]	...	300	...	...	4,796	7,318	33,940
[illegible]	2,368	11,518	3,322	4,618	[illegible]0	22,410	34,227
Total	3,724	22,165	14,044	21,97[illegible]			118,540
Cla[illegible]	No	No.	No.	No.	No.	No.	No.
Goats,	...	7	... [illegible]0	...	...	291	1,926
Timber,	...	315	1,3[illegible]	...	...	...	14,500
Bamboos,	...	14,500					
Class	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Leather,	...	... 25	2	500	...	...	500
Miscellaneous ([illegible]s,	...			...	...	...	27

STATISTICS OF THE RIVER TRAFFIC OF KUCH BEHAR STATE FOR THE SIX MONTHS ENDING FEBRUARY 1876. TABLE II. (IMPORTS.)

DESCRIPTION OF GOODS.	September.	October.	November.	December.	January.	February.	Total.
CLASS I.	*mds.*	*mds.*	*mds.*	*mds.*	*mds.*	*mds.*	*mds.*
Coal,	10,150	1,000	...	...	...	...	11,150
Cotton,	...	15	48	...	41	...	104
Indigo-seed,	107	...	...	...	...	...	107
Betel-nuts,	70	45	125	17	169	...	426
Wheat,	...	253	99	...	...	...	352
Pulses and gram,	633	317	387	338	179	...	1,854
Rice,	7	28	103	1,091	1,395	194	2,818
Paddy,	20	...	...	...	141	225	386
Iron,	35	...	40	11	...	51	137
Copper and brass,	2	...	14	110	75	179	380
Lime and limestone,	750	...	...	...	...	...	750
Stone,	...	...	1	...	...	...	1
Ghi,	13	...	2	...	...	11	26
Salt,	2,013	2,670	2,569	3,091	4,881	4,155	19,679
Other saline substances,	121	...	13	...	...	...	134
Spices and condiments,	386	76	23	55	88	56	684
Sugar, refined,	34	45	74	120	49	108	430
Sugar, unrefined,	303	224	124	138	199	1,199	2,187
Tobacco,	...	...	8	5	39	5	57
Miscellaneous,	150	...	...	...	...	...	150
Total,	14,794	4,673	3,630	4,976	7,256	6,483	41,812
CLASS II.	No.	No.	No.	No.	No.	No.	No.
Timber,	143	...	14	...	32	...	189
Cocoa-nuts,	33,622	3,300	...	...	...	...	36,922
Miscellaneous,	3,400	...	...	...	...	...	3,400
CLASS III.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Cotton (European) manufrs.,	2,755	...	2,550	1,500	7,781	2,600	17,186
Miscellaneous (Native) goods,	541	20	500	54	62	162	1,339
Do. (Europ.) goods.	900	...	...	...	...	...	900
Cotton manufactures,	1,005	...	...	...	...	...	1,005
Total,	5,201	20	3,050	1,554	7,843	2,762	20,430

From these tables it appears that the total of the exports during these six months under Class I. (articles registered by weight only) was 118,540 *maunds*, or 4339 tons; while the imports under the same class were only 41,812 *maunds*, or 1530 tons, being little more than one-third of the exports. In Class II. (articles registered by number only) there is nothing worthy of note, beyond the export of 14,500 bamboos in the month of October, and the import of 36,922 cocoa-nuts, almost all in September. Class III. (articles registered by value only) is almost an entire blank in the export table, but shows £2043 in the import table, of which £1,718, 12s. 0d., or 84 per cent., represents European cotton manufactures.

The Statistical Reporter furnishes detailed information concerning some of the chief staples of trade for the months beginning with November 1875. Jute is the most important article of export, aggregating 72,934 *maunds*, or 61 per cent. of the total exports in the half-year. Almost the whole of this quantity is despatched to Sirájganj in Pábná District, there to be transhipped into larger boats. A very small portion, only 850 *maunds* in five months, was sent direct to Goálandá. The jute-exporting marts of Kuch Behar may be arranged in the following order, with their totals for the five months November 1875 to March 1876. Balrámpur, 28,812 *maunds*; Chaora-*hát*, 17,149; Demakurí, 5437; Baksar-*hát*, 4200; Kuch Behar town, 3135; Durgápur, 2754; Bella, 2135; Gobrácchhárá, 1949; Mekhlíganj, 1476; Sílkurí, 979. Tobacco contributed 33,940 *maunds*, or 28 per cent. of the total exports. The following were the exporting marts in the month of December 1875, for which alone are details given:—Síbpur, 1747 *maunds*; Chilká, 750; Mátábhángá, 691; Kuch Behar town, 530; Sílkurí, 425. The English piece-goods imported came entirely from Sirájganj, the following being the receiving marts during the period of five months taken above:—Chaorá-*hát*, £660; Kuch Behar town, £473.

CAPITAL AND INTEREST.—Of the surplus coin gained by external commerce, some is of course hoarded, but much is employed as capital in trade. A few of the more well-to-do husbandmen lend money to their neighbours; others spend their savings in the improvement of their lands. There is no fixed rate of interest on money loans, but the rates which generally prevail are the following:—In small transactions, when the borrower pawns some article, such as ornaments or household vessels, equal in value to the sum borrowed, interest is charged at the rate of 6 *pies* in the rupee a month, or thirty-seven and a half per cent. per annum. In large transactions, where a mortgage is given on moveable property, the rate is 3 *pies* in the rupee a month, or eighteen and three-quarters per cent. per annum. In the same class of transactions, but with a mortgage on immoveable property such as houses or lands, the interest varies from twelve to eighteen per cent. per annum. In petty advances to cultivators, with or without a lien upon the crops, interest is charged at the rate of from 3 to 6 *pies* per rupee a month, or from eighteen and three-quarters to thirty-seven and a half per cent. per annum. No rate of interest, however, is recognised in the Civil Courts of the State,

higher than 3 *pies* in the rupee a month, or 18¾ per cent. per annum. From 7 to 10 per cent. on the purchase money of an estate is considered to be a fair return for capital invested in land. There are five large native banking establishments in the town of Kuch Behar, who advance money to revenue farmers and other influential people. In the rural parts, well-to-do husbandmen sometimes lend money on interest to their neighbours, and occasionally accept payment in kind.

INSTITUTIONS.—There are no important societies or institutions in Kuch Behar, except the artisans' school already referred to (*ante*, p. 398). There are also several schools supported by the State. No newspaper is published at Kuch Behar; but there is a printing press belonging to the State at Kuch Behar town, which is used principally for printing English and Bengalí forms, notices, etc., for public use.

HISTORY OF KUCH BEHAR STATE.—The traditions and early history of Kámrúp, a Hindu kingdom which included the present State of Kuch Behar, have been given in the Statistical Account of Rangpur (vol. vii. pp. 310-318), as quoted from Mr. Glazier's 'Report on the District of Rangpur,' which embodies the information recorded by Dr. Buchanan Hamilton. It is there stated that Rájá Nílámbhar of Kamatápur (now a ruin within the present State of Kuch Behar) was the last independent Hindu ruler of the country; and that, after his defeat and capture by Husáin Sháh, one of the Afghán kings of Gaur, in the beginning of the sixteenth century, anarchy prevailed for several years, and the land was overrun by wild tribes from the north-east. Among these the Koch came to the front, and founded the Kuch Behar dynasty, which exists to the present day. The following is the prevailing tradition concerning the origin of this family, as preserved in the MS. Account of Rangpur by Dr. Buchanan Hamilton, which does not materially differ from another legend which will be given presently.

'Two brothers, named Chandan and Madan, after the overthrow of Nílámbhar, established a short government of eight years at a place called Maralávás, about 20 miles north of Kamatápur. Their power was not only transient, but seems also to have extended to no great distance, while the greater part of Kámrúp remained in anarchy and subject to the invasions of various wild tribes. The Koch, who were by far the most powerful of these tribes, had at first a number of independent chiefs, but gradually united under the

authority of one leader, named Hájo. He seems to have been a person of great vigour, for he reduced under his government the whole of the District of Rangpur, except Gorághát, together with most of that portion of Assam which is included in Gauhátí and Kámrúp. [The present Districts of Jalpáigurí and Goálpárá were, when Dr. B. Hamilton wrote, included within Rangpur.] Hájo had no children except two daughters, Hirá and Jirá. The former of these had, before the rise of her family, been married to a certain Heriyá, who is said to have belonged to the impure tribe of Mech. Whether Jirá was married or not is not known; but she had a son named Sisu, while her sister had a son named Visu. Sisu is regarded as the ancestor of several younger branches of the family, who still possess *zamíndárís* in British Districts. [The chief of these branches is the Ráikat family of Baikunthpur, of whom a description has been given in the Account of Jalpáigurí District, where it is stated that the Ráikats themselves declare that Sisu was the brother, and not the cousin, of Visu.] Visu succeeded to the whole power of his grandfather. As he was not content with the instruction of the Kolitás, who seem to have been the original priesthood of his tribe, nor with the learning of the Bráhmans of Mithila, who had been formerly introduced, he procured some men of piety (Vaidiks) from Srihatta (Sylhet), and gave them the title of Kámrúpí Bráhmans; and these form the second colony of the sacred order that have settled in this country.

'To this era may probably be referred the composition of many of the books called *Tantras*, which are supposed to have been communicated by the god Siva to his wife Párvatí about 5000 years ago. One of the most celebrated of these books, the *Yogini Tantra*, mentions the amours of Hirá and the government of her son. There is no doubt that Kámrúp is usually regarded as the grand source of the *Tantrik* system of magic; nor is there any other period during which the learning of the Bráhmans flourished in that country, except the time between Visu and his great-grandson Parikhyit. The doctrines contained in these works admit of many indulgences necessary for new converts, and calculated to enable the Bráhmans to share in the pleasures of a sensual people. They inculcate, chiefly, the worship of the female spirits, who require to be appeased with blood; which was the original worship of the country, and has now become very generally diffused among the Bráhmans of Bengal, with whom these *Tantras* are in the highest request.

'It was now discovered that the Rájá was not a son of the poor barbarian Heriyá, but that his mother, although born a Koch, was not only herself of celestial origin, but had been the peculiar favourite of the god Siva, who was, in truth, the father of Visu. The prince, forthwith, took the name of Biswa Visu, or Bishwa Sinh, and bestowed that of Síb Sinh on Sisu, the son of Jirá; and this prince also claimed for his mother the honour of the most intimate favour of the god whose name he bore. Although the *Yogini Tantra* expressly calls the father of Hirá a barbarian (Mleccha), yet it was still further discovered about this time that the Koch were, after all, not an impure tribe, but were descended from certain Kshattriyas, who had fled into Kámrúp and the adjacent country of Chin to escape the violence of Parasuram, when that deity pursued the kings of the earth and gave their territory to the Bráhmans. It was admitted that the descendants of the Kshattriyas had, during their exile, departed from many observances of the Hindu law, and required a fresh purification. On the authority of this descent, the Koch, or at least all of them that have accepted the Hindu religion, adopted the title of Rájbansís, or offspring of princes; and the other rude tribes of Kámrúp and Chin, such as Mech and Hájong, who have followed their example in religion, have received the same name. The descendants of Hirá, still further elated by their divine origin, assumed the title of Deo or Lord; and all the reigning princes of the family are called Náráyan, which is one of the names of the supreme deity among the Hindus.

'Biswa Sinh was so weak as to divide his dominion between two sons, Nar Náráyan and Sukladhwaj. The former obtained the country west from the Sankos river, and was the ancestor of the Darang and Bijní Rájás; while the latter, who founded the Kuch Behar dynasty, obtained the kingdom west of the Sankos, together with both banks of the Brahmaputra. This division extended westward as far as the Mahánandá, and southwards to *sarkár* Gorághát, being about 90 miles from N.W. to S.E., and 60 miles from N.E. to S.W., and was a very fertile tract of country. The north-western extremity [now part of the present District of Jalpáigurí] was settled upon the descendants of Síb Sinh, from among whom the Rájás were bound to choose their Ráikat, or chief minister. This portion, as producing an annual income of Rs. 32,000, was called Battris-házárí. The general name given to the principality was Behar, from its having been the scene of the intercourse between Siva and the

daughters of Hájo. In order to distinguish this Behar from the Province of the same name, it has been usual to call it Kuch Behar; but all remembrance of the Koch is disagreeable to its princes, and at their capital any additional appellation given to Behar is considered exceedingly uncourtly.

'The Behar Rájás reckon by the era of their ancestor, Visu, whom they suppose began to govern in the Bengal year 916, or 1509 A.D. This date is scarcely reconcilable with the supposition that Husáin Sháh destroyed Kamatápur after a long siege, for he began to reign about 1496 A.D. [Stewart, in his *History of Bengal*, fixes the accession of Husáin Sháh at 1499.] A long anarchy, also, is said to have followed between the governments of Nílambhár and Visu. It must further be observed that an inscription erected by Rájá Prán Náráyan, the fourth in descent from Visu, proves that that prince was alive in the Sak year 1587, or 1665 A.D.; so that five reigns, according to the era of Visu, occupied 156 years, while the thirteen following reigns have only occupied 144 years. This inscription, again, seems to show that the era of Visu was not then in use, and is a recent invention. I think, however, that it cannot be much antedated, as we know from an independent source that the government of Parikhyit, the third in descent from Visu of the younger branch, was overthrown by a general of Akbar about the year 1009 of the Bengal era, or 1603 A.D.'

A lecture delivered by Bábu Rám Chandra Ghosh before the Kuch Behar Hitaishiní Sabhá, and printed in Calcutta at the expense of the Ráj in 1865, gives the following tradition concerning the origin of the kingdom, which is presumably now accepted at the Court, and is in harmony with the opinion expressed by Major Jenkins, late Governor-General's Agent on the North-East frontier, in a Report on Kuch Behar, dated 1849, and published in *Selections from the Records of the Bengal Government*, No. 5. The following paragraphs are a close translation of the Bábu's lecture, with a few omissions; the points of difference between this tradition and that adopted by Dr. Buchanan Hamilton are animadverted on as they occur:—

'Nothing is known about the early kings of Kuch Behar, or when and by whom the country was first peopled. After the disappearance of the early Hindu kingdoms of Matsya, Paundra, and Prágjyotíshpur, it is said that a king named Nilá or Niládwaj ruled here, the ruins of whose palace are yet shown near Bhotánta. After the

reign of this monarch, the country fell into anarchy, and continued in that state for a long time.

'Seventy or eighty years before the era of the Viṣu-bansa, or dynasty of Visu [a date which is subsequently fixed by the Bábu at 1511], a child named Kánta Náth was born at the village of Jámbárí. His father's name was Bhakteswar, and his mother's name Anganá. It is said that, by the favour of the goddess Kámákhyá, he became king of the whole Kámákhyá Kshettra and other countries, and was famous under the name of Kamateswar. The ruins of his muḍ fort and stone houses are still to be seen at Gosáinímarái. He had four queens, called Pancha Kanya, of whom one had an intrigue with Sasi Kumar, the son of his minister. When the king learned this, he put Sasi Kumar to death, and invited the minister to eat the flesh of his own son. The minister then fled to Dehli, and by his entreaties caused the emperor to send a large army to avenge his wrong. Kamateswar was defeated after an obstinate struggle. His wives committed suicide, to save their honour; the king was captured and led away in an iron cage, but died on his way to Dehli. He left no sons, and the country remained in a state of disorder for seventy or eighty years, until the rise of the founder of the Kuch Behar dynasty.' It is evident that this confused tradition, the earliest which can be localized in Kuch Behar, is identical with that which has already been quoted from Dr. Buchanan Hamilton, to explain the ruins of Kamatápur. It is there stated that the title of Kamateswar, or Lord of Kamatá, was taken by Niládwaj, the founder of Kamatápur; and the accounts of the overthrow of Nílámbhar, the third and last of that dynasty, agrees in every material particular with the story just given, except that the conqueror appears as the Afghan king of Gaur, and not the emperor of Dehli, and is identified by Dr. B. Hamilton with Husáin Sháh. The name Gosáinímarái appears on the map about two miles distant from Kamatápur, lower down the river Singímárí. It is not now a ruin, but the site of a well-preserved temple of the goddess Kamateswarí, the patroness of the Niládwaj family, who is now recognised and endowed by the Rájás of Kuch Behar.

'The *pandits* of India have spoken of the various royal dynasties as being descended from gods; and, in this way, the Kuch Behar princes are connected with Siva. On Chikiná Hill there lived a certain Mech, Heriyá by name, who had two wives, called Jirá and Hirá; by his wife Jirá he had two sons, Chandan and Madan. In

the year 917 of the Bengal era, or 1511 A.D., Chandan became king and reigned for thirteen years. He is regarded as the first king of the dynasty. With the other wife, Hirá, the god Mahádeo, or Siva, is said to have fallen in love, as related in the *Yogini Tantra;* two sons were born from this connection, Sisu Sinh and Visu Sinh, who came down from the hills, and lived at places called Hikshun and Aoyás. By the favour of Mahádeo, Visu Sinh became king of Kuch Behar and the neighbourhood in 1524 A.D., and ranks as the second king of the dynasty, dating from the era of Chandan. He was favoured by his divine father with many gifts, among which a weapon, called the *Hanumán-danda*, is said to be still extant. Visu Sinh did not die, but retired to a forest after a reign of thirty-one years. His brother, Sisu Sinh, had settled himself at Baikunthpur, with the title of Ráikat, where his descendants still remain. Visu Sinh left three sons, of whom the second, Nar Náráyan, succeeded him in the year 45 of the family era of Chandan, or 1555 A.D. This prince, with the assistance and advice of his younger brother, Sakladwaj, otherwise called Chiná Ráya, extended his kingdom in all directions. He conquered the whole of Kámrúp, and carried off in triumph the *chhatra* or umbrella of the king of Assam. He built a temple on the Kámákhyá hill, wherein he placed the images of himself and his brother. The Deb Rájá of Bhután became dependent, and paid tribute. The whole of Kámákhyá, together with parts of Dinájpur, Purniah, and Rangpur, were included in his dominions; and this tract is still held to form *sarkár* Kuch Behar. In his name the Náráyanípura money was first coined; one side of the rupee bears the name of Mahádeo, and the other side that of Malla Nar Náráyan. The royal seal, also, called Sinha Bhup, was first formed in this reign. The king gave to his elder brother, Nar Sinh, the *parganá* of Pángá; and to his younger brother, Sakladwaj, together with the title of Rájá, he gave Bijní, Darang, Bentalí, and the northern part of the Kámákhyá Kshettra, where his descendants are still to be found. During this reign a Bráhman, named Purushottama Bhatacharya, compiled a Sanskrit grammar and introduced it into the country.'

Before continuing the history of the Kuch Behar dynasty, it may be as well to indicate the points wherein the preceding tradition differs from the account given by Dr. Buchanan Hamilton, which is usually accepted as the authoritative story. In the first place, the name of Hájo disappears altogether, and with it any reference to the tribe

called Koch, of which the very name is known to be obnoxious to the ruling family. On this it may be remarked that Dr. Latham, in his *Ethnology of India*, is disposed to regard Hájo as an eponymous hero, representing the Assam tribe of Hojái (Hajong?). In the place of Hájo, there appears Chandan as the founder of the family, who is only mentioned incidentally by Dr. B. Hamilton, together with his brother Madan, as a Koch chief prior to, but totally unconnected with, Hájo. Hirá and Jirá appear, again, not as sisters, but as wives of the same husband, who is a Mech; and Visu and Sisu are brothers, and not cousins. The name of the barbarian Chandan, and not that of the divinely descended Visu, is chosen to give the era to the kingdom; and the inheritance descends undivided to Nar Náráyan, who is represented as by far the most powerful member of the dynasty. In corroboration of the legend given by the Bábu, it may be mentioned that Major Jenkins, in the Report already referred to, states that 'of the predecessors of Visu and Sisu nothing is known, except that two persons of the names of Chandan and Madan were their immediate ancestors.' The same authority, also, omitting all notice of Hájo, states that it was Nar Náráyan who extended the kingdom over all Lower Assam, and that he left his brother Rae (*sic*) to rule in Kámrúp. Colonel Dalton, in his *Ethnology of Bengal* (pp. 89, 90), adopts from Dr. Buchanan Hamilton and Mr. Hodgson the story of Hájo, but quotes the following paragraph from *The Journal of the Asiatic Society of Bengal*, 1855 (p. 9), which proves that the kingdom was not divided before the reign of Nar Náráyan, and incidentally explains the occurrence of the name of Hájo as the founder of the family:—

'A large vaulted vestibule, measuring 40 × 20 feet, in front of the old temple of Hájo in Kámrúp, was built by Nar Náráyan, Hájo's great-grandson, in 1550 A.D. He found the temple entirely deserted, and almost lost in impenetrable jungle. He not only repaired it, but endowed it with lands, priests, musicians, and dancing girls. The vaulted brick addition of Nar Náráyan replaced a dismantled edifice of stone, which he had not the skill to restore. The temple is situated on a hill about 300 feet high, whence, probably, it takes its name, as *háju* means "hill" in the Bodo and cognate languages. From the fragments of the old vestibule a rude flight of steps has been constructed, from the tank below to the ancient fane on the hill, in which the object of worship is, in fact, an image of Buddha. Nar Náráyan also rebuilt the temple of Kámákhyá, which

had been destroyed by Kálápahár, the great renegade and iconoclast.' It will be noticed that the date just mentioned, 1550 A.D., is just five years before the accession of Nar Náráyan, according to the lecture of the Bábu.

Lakshmí Náráyan succeeded to his father, Nar Náráyan, in 1588 A.D. He is described as being a weak and peaceful prince, and as being the first of his family that was brought into collision with the Mughul empire. One Mukunda Sárababhaum, being jealous of him, went to Dehli, and instigated the Emperor Jahángír to despatch an army against him. Lakshmí Náráyan was defeated, and taken prisoner to Dehli, where he gave in his submission to the Emperor, promised for the future to strike coin only in halves, to abandon the playing of music in his palace, and other royal prerogatives. On these conditions he was permitted to return to his kingdom. On his way home, he paid a pilgrimage to the shrines of Benáres. It is said that the well-known Náráyaní half-rupees were first coined in the reign of this prince, who died in 1622, and was succeeded by his son Bír Náráyan. In confirmation of these dates, which are taken from Bábu Rám Chandra Ghosh, it may be mentioned that Dr. Buchanan Hamilton, in his Account of the Kámrúp branch of the family, states that the Muhammadans took possession of that division of the Koch kingdom, and established themselves at Ránǵámátí, in about the year 1603 A.D., or two years before the death of Akbar. Bír Náráyan only reigned for five years, and was followed by his son, Prán Náráyan, who came to the throne in 1627 A.D. He was a great Sanskrit scholar, and bountifully encouraged the study of that language in Kuch Behar. He built the temples of Jalpeswar, Rameswar, and Kamateswar. His connection with the temple of this last goddess at Gosáinímarái has already been alluded to (*ante*, p. 369), in describing the ruins of Kamatápur. He is said to have reigned for the long space of thirty-nine years, and to have devoted himself for nine months of each year to affairs of State, while the remaining three months were spent in pleasure and amusement. His son, Mod Náráyan, succeeded, and reigned for fifteen years. He was the seventh king of the Visu-bansa, or, according to Dr. B. Hamilton, who omits all notice of Chandan, and commences the dynasty with Nar Náráyan, the fifth prince in direct descent from that monarch. Dr. B. Hamilton states that the construction of the line of fortifications along the southern border of the old kingdom of

Kuch Behar is attributed to Mod Náráyan. It is probable that about this time, owing to dissensions among the Mughuls, Kuch Behar had ceased to recognise the habit of obedience to the Dehli empire.

Mod Náráyan died childless in 1681, and was succeeded by his brother, Basu-deo Náráyan,—the first break in the direct succession from father to son since the time of Visu. After two years, Basu-deo was succeeded by Mahendra Náráyan, the grandson of his brother Vishnu. In this reign the arms of the Mughuls began to press hard upon the southern border of the kingdom. It is said that the *parganás* of Kákiná, Tepá, Manthaná, Kátpur Kazirhát, Bodá, Pátgrám, and Purub-bháj, were now torn from their native prince, and formed into the Muhammadan *sarkár* of Kuchwárá or Kuch Behar. The three last-mentioned of these *parganás*, which now form part of Jalpáiguri District, are to the present day held in *zamíndárí* tenure by the Kuch Behar Rájá. Mahendra died childless in 1695, after a reign of twelve years, and was succeeded by Rúp Náráyan, of whose genealogy it is only remarked that he was 'one of the relatives' of the late Rájá. During his reign of twenty years, several other *parganás* were lost. According to Major Jenkins, the accession of Rúp Náráyan was not undisputed, and the Mughuls were the arbiters of the inheritance. He states that the Ráikats of Baikunthpur, who have been already alluded to as the descendants of Sisu, the brother of Visu, had exercised during eight generations their hereditary privilege of holding the *chhatra* or umbrella over the head of the Rájás at their installation. But on the death of Mahendra Náráyan, the Ráikats, Bhagí Deo and Jag Deo, attempted to possess themselves of the crown of Kuch Behar. They were defeated by Rúp Náráyan, the next heir to the throne, and his brothers, assisted by the Mughul troops. Major Jenkins is of opinion that the encroachments of the Muhammadans are to be dated from the accession of Rúp Náráyan, and that the annexation to Bengal of Bodá, Pátgrám, and Purub-bháj took place about the beginning of the eighteenth century. Rúp Náráyan died in 1715, and was succeeded by his son Upendra, who reigned for forty-nine years. It was towards the end of this reign that the Bhutiás are said to have commenced their depredations on the kingdom. It is from this same period that Bábu Rám Chandra Ghosh dates the predominance of the Názir Deo, or hereditary commander-in-chief, in all political affairs, so that the Rájás became mere puppets in his hands.

The order of succession is thus given by the Bábu. On the death of Upendra, in 1764, his son Debendra ascended the throne. He was only twelve years old, and in the second year of his reign he was assassinated by a Bráhman, named Rati Sarmá. A dispute followed as to the succession. Rudra Náráyan Názir Deo, who was the most powerful member of the royal family, marched upon the capital from his palace of Balrámpur, with a force of 6000 men, intending to raise to the throne his own nephew, Khagendra. Ultimately, however, Dhairjendra Náráyan, the son of a step-brother of the late Rájá, was accepted as king. Among his first acts was to put to death his eldest brother, Rám Náráyan, to whose assistance he owed his own advancement. The Bhutiás, who exercised great influence over Kuch Behar at this time, were incensed at this treachery. They invited the Rájá to the hills in 1771, where they kept him a close prisoner. They raised his younger brother Rájendra to the throne, but carried him too away to the hills, where he died in 1773. They then nominated Dharendra, the son of the imprisoned king, to succeed his father; but he also died in 1775, after a reign of two years. On this, the principal officers of the kingdom went to Dinájpur, and besought the intervention of the East India Company.

The preceding narrative is taken from the lecture of the Bábu, and is far from consistent with the course of events as given by other authorities. It forms, however, the most minute account available, and professes to show the list of princes with their dates. Dr. Buchanan Hamilton gives the following brief summary of events, which, again, is not easily reconcilable with the historical sketch drawn up by Major Jenkins :—'The confusion that ensued in the Mughul government, in the early part of the eighteenth century, secured the Kuch Behar Rájás from further encroachments from the south; but their reduced state now exposed them to the depredations of the Deb Rájá of Bhután, who deprived them of one-half of their remaining territories. The attack, indeed, was on the point of proving entirely ruinous, when Darpa Deo, the Ráikat or hereditary minister, rebelled against his sovereign and kinsman, and entered into an alliance with the Deb Rájá. He consented to cede a considerable portion of the Battris-hazárí, on condition of being supported in his design to overthrow the Rájá, to whose title there were some acknowledged objections. Having procured troops from Bhután, he invaded Kuch Behar; when the Rájá, in despair, ap-

plied for assistance to the Company.' On this passage, it may be remarked that the part played by the Názir Deo is entirely omitted, and the name of Darpa Deo is not to be found elsewhere. On the whole, the summary of Dr. B. Hamilton bears a suspiciously close resemblance to the circumstances which have already been described as attending the accession of Rúp Náráyan and the interference of the Mughuls.

So far as it is possible to get at the real facts, in correction of the two preceding stories, the following narrative has been condensed from two authoritative papers on the early history of Kuch Behar; of which the one, unsigned and undated, is published as Appendix B. in *Selections from Unpublished Records of Government*, edited by the Rev. J. Long (Calcutta 1869); and the other is contained in Major Jenkins' Report, already cited. The former chiefly treats of the continual disputes occasioned by the anomalous position of the Názir Deo; while the latter is directly concerned with showing the degree of interference which the English Government exercised, from an early period, in the internal affairs of Kuch Behar. The MS. Records of the Board of Revenue, from 1782 to 1807, which contain not a few references to Kuch Behar, have also been used in the preparation of this narrative.

It is said that to Visu Sinh, the founder of the Kuch Behar family, there had been given by his divine father a *chhatra* or umbrella and a rod, the two symbols of sovereign authority. It was the duty of the Názir Deo, or hereditary commander-in-chief, to hold the *chhatra* over the Rájá at his installation; while the rod was carried by the Díwán Deo, or principal finance minister. Both these officers are descended from the same stock as the Rájá.

It seems certain that the Bhutiás had always maintained an intimate connection with the affairs of Kuch Behar. It has already been stated that, according to the native tradition, the great Rájá, Nar Náráyan, had rendered Bhután tributary to his kingdom. Major Jenkins gives in his adhesion to the theory that the Koch tribe are of Thibetán origin, and descended from the hills of Bhután in the time of the brothers, Visu and Sisu. He quotes from a MS. Sketch of Bhután by Mr. Scott: 'The country was ruled over by a Koch Rájá until its conquest by the Dharm Rájá,' which happened, according to Turner, about two hundred years ago. The Bhutiá trade with Bengal was carried on formerly, as now, through territory occupied by Koch chiefs; and when a party of Bhutiás arrived in

Kuch Behar, it was customary that they should be maintained at the public expense.

On the death of Rájá Mahendra Náráyan without issue (*cir.* 1695), the country was overrun by the Bhutiás, until Sánta Náráyan Názir Deo, with the assistance of the Muhammadan Viceroy, expelled the invaders after a long struggle, and placed Rup Náráyan, the lineal heir, on the throne. He stipulated, however, that the office of Díwán Deo should be secured to his own elder brother, Śat Náráyan, and that the revenues of the State should be for the future apportioned in the following manner :—To the Názir Deo, for himself and for the pay of the troops to be maintained by him, nine-sixteenths of the total revenue; to the Díwán Deo, for civil expenses, one-sixteenth ; to the Rájá, for the support of his dignity as prince, the remaining six-sixteenths. The next interference of the Bhutiás was occasioned by the murder of the infant Rájá, Debendra Náráyan (*cir.* 1766). The assassin, who was a Bráhman, had been instigated by Rámánand Gosáin, the brother of the well-known Sarbánand Gosáin Ráj Guru. For this crime the Bhutiás, exercising apparently a usual authority, put Rámánand to death. Rám Náráyan, the Díwán Deo, was now the next heir to the throne ; but he was passed over, with the consent of the Názir Deo, on the ground that his present office incapacitated him from ever becoming Rájá, and his younger brother, Dhairjendra, was placed on the throne. The first act of the new prince was to deprive Rám Náráyan of his office as Díwán Deo; but he was compelled to reinstate him, at the dictation of the Bhutiás. Not long afterwards, however, Dhairjendra found an opportunity of getting him put to death. For this affront to their authority the Bhutiás seized the Rájá, and carried him off to Bhután, appointing his brother, Rájendra, to rule in his place. There does not appear to have been any objection made to the interference of the Bhutiás on these occasions. But on the death of Rájendra, which happened within two years, the Názir Deo, Khagendra Náráyan, proceeded to exercise what he claimed as his privilege, the power of electing a Rájá, and set up Darendra, the son of Dhairjendra. The Bhutiás remonstrated against the appointment of the son of a person whom they held as prisoner, but the Názir Deo persisted in his nomination. The Bhutiás came down in force, and were on the point of carrying away the young Rájá and his mother, when they were attacked by the Názir Deo. On their side they had appointed to

the throne Barjendra Náráyan, a son of the captive Rájá's elder brother; and each party proceeded to maintain the prince nominated by itself. The Názir Deo, on being worsted in the struggle and driven out of the country, applied to the English for assistance.

The authorities all agree in stating that it was in the year 1772 A.D. that the English accepted the conditions offered by the Názir Deo, and marched upon Kuch Behar. The treaty, however, upon which this alliance was based bears date April, 1773; and the treaty with Bhután, which terminated the military operations, and procured the release of Rájá Dhairjendra, is dated in the same month of 1774. The Názir Deo concluded the engagement on behalf of the infant Rájá which assigned to the English for ever one-half of the revenues of Kuch Behar. Captain Jones was ordered to march, with four companies of *sipáhís* and a field-piece. He quickly dispossessed the Bhutiás, and drove them to the hills. In the following year (?), 1773, he took the fortress of Dálingkot, on which the Bhutiás sued for peace, through the mediation of the Teshu Lama, the Regent of Thibet. Rájá Dhairjendra was thus released from confinement; and, according to Dr. Buchanan Hamilton, great favour in settling the frontier was shown towards the Bhutiás, probably to gain their friendship with a view to commercial advantages. At the same time, the Ráikat, Darpa Deo, who was, according to the same authority, at the bottom of the whole disturbance, was confirmed in his possession of those parts of Battris-hazárí which had not been ceded to Bhután; but a revenue was placed on his lands, and he was put exactly on the same footing as an ordinary *zamíndár*, while he was deprived of all authority in Kuch Behar proper.

The following is the treaty of 1773 between the Rájá and the English Government, which deserves prominent quotation in this place, as it is the only authoritative document in existence to define the present relations between the two parties. It is taken verbatim from Mr. Aitchison's *Treaties, Engagements, etc.* (vol. i. pp. 151-153):—

'ARTICLES OF TREATY BETWEEN THE HONOURABLE EAST INDIA COMPANY AND DARENDRA NARAYAN, RAJA OF KUCH BEHAR.

'Darendra Náráyan, Rájá of Kuch Behar, having represented to the Honourable the President and Council of Calcutta the present

distressed state of the country, owing to its being harassed by the neighbouring independent Rájás, who are in league to depose him, the Honourable the President and Council, from a love of justice and desire of assisting the distressed, have agreed to send a force, consisting of four companies of *sipáhís*, and a field-piece, for the protection of the said Rájá and his country against his enemies; and the following conditions are mutually agreed on :—

'1st.—That the said Rájá will immediately pay into the hands of the Collector of Rangpur Rs. 50,000, to defray the expenses of the force sent to assist him.

'2d.—That if more than Rs. 50,000 are expended, the Rájá will make it good to the Honourable the English East India Company; but in case any part of it remains unexpended, that it be delivered back.

'3d.—That the Rájá will acknowledge subjection to the English East India Company upon his country being cleared of his enemies, and will allow the Kuch Behar country to be annexed to the Province of Bengal.

'4th.—That the Rájá further agrees to make over to the English East India Company one-half of the annual revenues of Kuch Behar for ever.

'5th.—That the other moiety shall remain to the Rájá and his heirs for ever, provided he is firm in his allegiance to the Honourable United East India Company.

'6th.—That in order to ascertain the value of the Kuch Behar country, the Rájá will deliver a fair *hastobud* (revenue statement) of his District into the hands of such person as the Honourable the President and Council of Calcutta shall think proper to depute for that purpose, upon which valuation the annual *málguzárí* (assessment) which the Rájá is to pay shall be established.

7th.—That the amount of the *málguzárí* settled by such person as the Honourable the East India Company shall depute, shall be perpetual.

'8th.—That the Honourable English East India Company shall always assist the said Rájá with a force when he has occasion for it, for the defence of the country, the Rájá bearing the expense.

'9th.—That this treaty shall remain in force for the space of two years, or till such time as advices may be received from the Court of Directors empowering the President and Council to ratify the same for ever.

'This Treaty signed, sealed, and concluded, by the Honourable the President and Council at Fort William, the fifth day of April 1773, on the one part, and by Darendra Náráyan, Rájá of Kuch Behar, at Behyar Fort, the 6th Magh 1179, Bengal style, on the other part.'

Concerning this treaty, it may be remarked, in the first place, that the option and ratification, implied in clause 9, does not appear to have been carried into effect. It is also noteworthy that the half of the revenue, to be paid to the English Government, is clearly marked out as a tribute and not as a tax, by the circumstance that its amount is to be fixed once and for all, at a date which is twenty years prior to the Permanent Settlement of Lord Cornwallis. As a matter of fact, the precise amount was not finally agreed upon until 1780, when it was placed by Mr. Purling, Collector of Rangpur, at *sikká* Rs. 62,722, equivalent to Company's Rs. 67,700. 15. 0, which has continued to be paid up to the present day. It may further be observed, that the introductory clause speaks of 'neighbouring independent Rájás' in the plural, which must be intended to include more than the Deb Rájá of Bhután; and this phrase, consequently, lends some authority to Dr. Buchanan Hamilton's otherwise unsupported statement, that the Ráikat of Baikunthpur had much to do with the quarrel.

It is curious that the Názir Deo did not cause any provision to be inserted in the treaty with the English to secure his own traditional rights; and the next trouble in the State arose from the uncertainty which still remained on this point. On the release of the old Rájá Dhairjendra by the Bhutiás, it was found that his mind had been rendered weak and gloomy by his long confinement. He proceeded forthwith on a pilgrimage to Gayá, and gave himself up entirely to religious matters. His son, Rájá Darendra, who had concluded the treaty with the English, was recognised as ruling prince till his death in 1780. For the three following years the old man nominally exercised the powers of Rájá, but the whole management of the country had fallen into the hands of his Ráni and her favourite, Sarbánand Gosáin. Through their intrigues with the Collector of Rangpur, the Názir Deo was deprived of his rank and all his possessions, and driven as a fugitive into Assam. On the death of the Rájá in 1783, the Ráni produced a document, which purported to be his will, appointing her sole guardian to the infant Rájá Harendra

Náráyan, the late Rájá's son by another wife. Her administration of affairs seems, at first, to have been quietly accepted, and a proclamation was issued in May 1784, by the Governor and Council, confirming her powers. But the conduct of the Rání and her minister, Sarbánand Gosáin, had reduced the country to a state of anarchy. The Názir Deo returned to the country, and began to intrigue with the English authorities. By urging that the annual tribute would not be regularly paid, if the Government were left in the hands of a woman, he persuaded Mr. Goodlad, who had been deputed to settle the affair, to enter into engagements with him for the revenue of the current year. He appears to have next assumed all the marks of supreme power. He seized the royal seal, styled his own son Jubaráj or Náib Rájá, and gratified his revenge against the Rání and her party in every way. This produced complaints to the English Government, who at length sent Captain William Smith with a military force, in April 1784, to protect the persons of the Rání and the Rájá. After due investigation, the Názir Deo was deprived of the revenue collections, which were given to Sarbánand Gosáin, jointly with Kási Náth Sundar Náráyan, the Díwán Deo; and the young Rájá was confirmed on the throne.

This settlement of affairs was not final. The Názir Deo returned into Assam; but he seems to have carried on his intrigues as actively as ever, through his adherents who remained in the country. The administration of the Rání was obnoxious to the chief officers of the State, whom she is said to have deprived of all their possessions. At length, in 1788, a conspiracy was formed of all the discontented nobles, including the Díwán Deo and the Dágar Deo, under the leadership of Bhagabant Náráyan, the brother of the Názir Deo. They raised a body of troops, attacked the Rájbárí or royal palace, and forcibly carried away to Balrámpur the Rání and the young Rájá, together with the Gosáin. Balrámpur was the residence of the Názir Deo, but it is said that he himself was not in Kuch Behar at the time. This outrage led to the immediate interference of the collector of Rangpur. A party of *sipáhis* were detached to Balrámpur, and an action took place in which several men were killed. The Rájá and Rání were released, and the principal conspirators were captured and brought as prisoners to Rangpur, to await the orders of Government. A Commission was appointed in April 1788, consisting of two Civil Servants, 'to make a report on the pretensions of the rival parties, on various subjects connected with

the state of the country, and on the mode in which English influence should be exercised for its better management in the future.' The Názir Deo was induced to surrender himself, by a promise of pardon; and a full investigation took place, which was continued at Rangpur, Mughul-hát, and Kuch Behar town for nearly six months. The Commissioners submitted their report in December 1788. From this document it appears that the Názir Deo not only claimed as his own patrimony the *parganás* of Bodá, Pátgrám, and Purub-bhág, within the District of Rangpur, in addition to nine-sixteenths of Kuch Behar proper, but also the privilege of disposing absolutely of the succession to the Ráj, 'under the precedent established by his ancestor Sánta Náráyan.' On this last demand the Commissioners did not think it needful to say anything, and they rejected his claims to the *parganás* in British territory. They confirmed him, however, in his title and office of Názir Deo, and in the possession of the lands extending for two *kos* round his house at Balrámpur. With reference to his claim to a definite share of the lands of the State, the Commissioners allowed it to the extent of awarding him, not the possession of the lands, but the payment of the value of nine-sixteenths of the net revenue, after deducting all charges of administration as well as the tribute. It would appear that this payment was subsequently commuted for a fixed money allowance of Rs. 500 a month, or £600 per annum. So late as April 1798, it appears that the Názir Deo refused to accept these terms, and in a document of about the year 1810, they are still described as only 'a provisional support for the Názir Deo, until his claims are decided on by Government;' but from henceforth his power was no longer a source of danger to the equilibrium of the State. Dr. Buchanan Hamilton, writing about 1809, appears to think that the Názir Deo had been rather hardly treated; and he presents his case under a new aspect. 'When the Musalmáns settled their new conquest of *sarkár* Kuch Behar, they gave the *zamíndáris*, or management of the soil, to various officers and servants of the Rájá, by whose treachery they had, probably, been assisted. Of these, three considerable estates were in the possession of a branch of the Rájá's family, from among the members of which the Názir Deo, or commander of the troops, was always appointed; and these estates had been granted as a part of the means by which the expense of the army was to be defrayed. When the British were bound by treaty to defend the country, the Rájá represented that he had no longer any occasion to support a military establishment, and that,

consequently, the Názir Deo had no pretence for retaining the estates. The Government have thought it just to allow the Rájá to enjoy the disputed estates, as a *zamíndár*, and to receive whatever profits may be derived from their management. The possession, which the Názir Deo had obtained from the Muhammadans, seems to render the case doubtful; but the claim of the Rájá is certainly possessed of great weight.'

With reference to the general administration of the country, the Commissioners were careful to assert that the Rájá, by the terms of the treaty of 1773, was an independent, though a tributary, prince. They pointed out that 'he was left in possession of the two great marks of sovereignty,—the right of coining money impressed with his own name, and the administration of justice.' They argued, therefore, that the State of Kuch Behar 'had made only a partial and voluntary surrender of its rights, and maintained its independence unimpaired in its domestic administration.' Unavoidable circumstances, occasioned mainly by 'the existence of rancorous parties within the State,' but also partly by the mode adopted for realizing the tribute, and by the depreciation of the local currency, had rendered necessary the repeated interference of the Government; but such interference had been regulated by no uniform principle, and had created a fresh series of evils. The Commissioners, therefore, recommended the appointment of a Resident with the Rájá; Mr. H. Douglas was nominated to this appointment in 1789, but the early records of his office are not forthcoming.

Previous to this date, and apart from disturbances of exceptional violence, the intervention of the English Government had been of a very limited nature. It was entirely vested in the Collector of Rangpur, to whom was entrusted the collection of the tribute agreed to be paid by the treaty of 1772. He committed the total collections of Kuch Behar to *sazáwals* appointed by himself, who deducted the half-share of the Government, and paid over the remainder into the treasury of the Rájá. In 1780, however, Mr. Purling, then Collector, was directed to make a *hastobud*, or general revenue statement, of the whole of Kuch Behar. From that year the amount of tribute was fixed, according to the express terms of the treaty; but for eight or nine years subsequently, it was collected through *sazáwals* in the same manner as before, who were, on some occasions, nominated directly by the notorious Rájá Debi Sinh, the farmer of Rangpur. The duty of realizing the tribute gave the Collector

frequent occasion for irregular interference in the affairs of Kuch Behar. The Rájá's mint was stopped, because the *nárâyaní* half-rupees were not readily negotiable; the coinage was limited to Rs. 1000 a month, for the same reason; and the chief officers of the State were called to Rangpur, and suspended, imprisoned, and punished for alleged contumacy, according as each successive Collector sided with one or other of the rival parties in Kuch Behar.

On the appointment of Mr. Dougias as Resident in 1789, or Commissioner (for both terms are used), not only was order restored, but a regular course of procedure was introduced. He seems to have supplanted entirely the authority of the Ráni, and her minister Sarbánand Gosáin. He conducted himself all the offices, whether judicial or revenue, of the State; or at least superintended the proceedings of the Courts, and controlled their decisions. He made quarterly returns to the Sadr Díwání Adálat and the Revenue Board of Calcutta, according to the different departments to which his work belonged. Besides these duties, he had also the management of the Rájá's estates in Rangpur; and in the early part of 1790, he complained of the multiplicity of business which distracted his attention. Nevertheless, in April of that year, there was transferred to him 'the sole charge of the Districts under the superintendence of the Resident of Goálpárá.' These Districts, which comprised the whole of the present District of the same name, together with a few *zamindáris* now within Maimansinh, were then in a very unsettled state; and they continued for a long time to distract the attention of the successive Commissioners of Kuch Behar. In May 1790, Mr. Douglas made his first report on the condition of the revenue; but it was not till the year 1798, when Mr. Ahmuty was Commissioner, that a regular register of the lands of the State was made. It was submitted at the same time as the quinquennial register of the Rájá's estates in Rangpur, and was attached to that document. The Rájá, Harendra Náráyan, came of age in 1801, after his long minority; and Mr. Ahmuty was directed to make over the administration to him. During the twelve years which the Commissionership lasted on this occasion, there is little evidence to show what was the degree of control exercised over Kuch Behar, except in the matter of the *nárâyaní* coinage. In 1795, the Resident wrote that the Rájá was desirous of coining money; but as the Government had frequently prohibited this, he thought it needless to address them on

the subject. In 1796, the Board of Revenue suggested the introduction of *sikká* rupees into Kuch Behar, but this proposal was not carried out; and in 1799, it appears that the mint was again in operation, for the Resident wrote to the Government, recommending that it should be closed for a period of three months. Another document worthy of notice is an order from Government in 1792, ordering that the Settlements, then in course of formation, were to be made only for the unexpired term of the Rájá's minority. From these two last documents, Major Jenkins infers that the mint was not under the control of the Commissioner, except through a direct application to Government; and that the Settlements made by him were in no respect binding on the Rájá after he attained his majority.

On the removal of the Commissioner in 1801, it appears that the administration and the superintendence of the police in Kuch Behar had been transferred to the Collector of Rangpur; but in January 1803 it was again found necessary to appoint a Commissioner, 'for the purpose of carrying into effect, in concert with the Rájá,' certain necessary arrangements for the collection of the public revenue, and the administration of justice, and for the adoption of a proper and efficient system of police. It was stated in the Resolution appointing Mr. F. Pierard as Commissioner, that this step had been taken at the request of the Rájá; but the Rájá persistently denied this, and on Mr. Pierard's arrival at Kuch Behar, expressed his strong repugnance to the measure contemplated. The Rájá's obstinacy finally overcame the determination of the Government. Mr. Pierard was withdrawn in 1804, and in the following year another gentleman was appointed, with modified instructions. The new Commissioner was directed to endeavour to procure the Rájá's assent to the introduction of the Regulations, and to establish tribunals after the British model, but under the Rájá's own officers. Until this could be effected, he was only to give general assistance in the administration, and to interpose his advice for the prevention of serious injustice. But his efforts were not more effectual than those of his predecessor; and in June 1805 the separate appointment of a resident Commissioner at Kuch Behar was abolished, and the duty of communicating with the Rájá was again vested in the Collector of Rangpur. The Rájá was at the same time informed that the Government had not altered its views with regard to 'the right of interference, and the introduction of its authority into his

country;' but had only suspended the measure, in the hope that further experience would induce him to give his voluntary assent to it.

Lord Cornwallis, when Governor-General of India, had insisted upon the importance of instilling sound principles into the mind of the prince while he was a minor; and in 1790 the Commissioner at Kuch Behar had written: 'In compliance with my instructions, I will take the greatest care to have the young Rájá properly instructed in every branch of useful knowledge, so as to qualify him for the management of his own affairs, and by that means divert from his country the evils which have attended the incapacity and ignorance of its former rulers.' But as soon as he attained independence, he gave himself up entirely to the affairs of his *zanáná*. He is described by Dr. Buchanan Hamilton (*cir.* 1809), who studiously refrained from visiting his territories, as 'a poor creature, exhausted by drunkenness and debauchery.' The same authority repeats stories circulating among the natives, which were intended to be complimentary, but were not calculated to exalt their hero in the judgment of Europeans.' To this day his memory lingers in Kuch Behar, among certain classes, as that of a devout and accomplished prince. It was in his reign that immigration from Bengal first began to assume large dimensions. Dr. B. Hamilton states that 'the whole management of the country is in the hands of strangers, who are alleged to be mere sharks; for all the Rájbansí chiefs, like their prince, are either unable or unwilling to attend to business.' For the first time, the names of Bengalí Bábus now appear as holding the principal offices in the State; and the *rayats* are represented as daily quitting the country. In reply to a petition, seeking redress for grievances thus caused, and forwarded through the Collector of Rangpur in 1811, it was announced that, 'after the orders which had been passed on 26th August 1802, regarding the independent rights of the Rájá of Kuch Behar, the Government does not deem it proper to interfere in a case of justice between individuals.' The interference of the successive Collectors of Rangpur was almost entirely taken up in preserving the Názir and Díwán Deos and their families from the rancorous persecution of the Rájá. On one occasion the Collector was authorized, if he thought it necessary, to send a detachment of troops from Rangpur, to maintain the Názir Deo in the estate which had been allotted to him as a provisional support. On a subsequent occasion, in consequence of the maltreatment of

the *mukhtár* of the Díwán Deo, the Collector proceeded to Kuch Behar, and after an investigation, ordered the *mukhtár* to be released from prison, and left a native officer's party to protect the family. On the withdrawal of that detachment, the Rájá caused the *mukhtár* to be again seized, and finally put to death in November 1812. The Díwán Deo now considered his own life in danger, and a second military party was sent for his protection; and the Collector, on his return from another visit to Kuch Behar in February 1813, reported that 'from the malignity manifested by the Rájá towards the Díwán Deo, and his insolent behaviour to himself, he conceived any further remonstrance on his part useless.'

This outrageous conduct induced the Government again to adopt the course of appointing a resident Commissioner at Kuch Behar, and in August 1813, Mr. Norman Macleod was selected for this office. At first the Rájá received him with disrespect, but in the following year 'seemed to evince a disposition to conform to the wishes of Government,' and Mr. Macleod was directed to prepare for the introduction of a system of civil and criminal jurisdiction in the name of the Rájá, but through the agency of the Commissioner. In furtherance of this object, and for the more effectual control of the police in Kuch Behar, the Commissioner was invested with the powers of a Joint-Magistrate in the adjoining *thánás* of Rangpur. Mr. Macleod was also occupied in making an investigation into the circumstances attending the murder of the *mukhtár*, and into a supposed treacherous alliance of the Rájá against the British Government. But he altogether failed to induce the Rájá to assent to any of the proposed changes in the administration; and in February 1816 the Government resolved to recall their former orders, and to relinquish the attempt to administer the affairs of the country through the direct agency of a Government servant.

From that date up to the year 1849, when Major Jenkins submitted his report, that officer states that he is not aware of any interference in the affairs of Kuch Behar, except by way of advice. In November 1816, Mr. Macleod was succeeded as Commissioner by Mr. D. Scott; who forthwith became involved, in his capacity of Joint-Magistrate of North-East Rangpur, in deputations to the Gáro Hills and to Goálpárá, for the settlement of various revenue matters, and was constantly absent from Kuch Behar. From the commencement of the Burmese war in 1823-24 to his death in 1831, he was so entirely taken up with superintending the prosecution of

hostilities on the Eastern Frontier, and afterwards with arranging a system of government for Assam, that he never returned to Kuch Behar. The same may be said of his successor, to whom Major Jenkins himself succeeded in 1834. The principal subjects of remonstrance with the Rájá, during the period of Mr. Scott's Commissionership, were confined to matters connected with the Názir Deo and the Díwán Deo. The tribute, also, to the Government had fallen into arrear, owing to the Rájá's total neglect of public affairs and his extravagance. The Rájá had fixed his residence first at Bhutántárí, and afterwards at Dhuliyá-bárí; but he finally retired to Benáres, where he died in 1839, after a reign of fifty-six years. Before he left his kingdom, he had appointed his eldest son, Sivendra Náráyan, and his fourth son, Bájendra Náráyan, to be joint managers of the country. On the death of their father, there was some dispute concerning the inheritance; but Sivendra was confirmed as Rájá by the Government. By rigid economy, and with the indulgence of Government, he cleared off all the arrears of tribute which encumbered the State. He also freed himself entirely from the private debts inherited from his father, and is said to have laid by considerable accumulations. He paid particular attention to revenue matters, and to the improvement of his estates at Rangpur; and was as careful in the regulation of his own expenses as in the supervision of the public officers of finance. Being childless, he adopted as his heir, Narendra or Chandra Netra Náráyan, the fourth son of his brother Bájendra. Like his father, he died on a pilgrimage to Benáres, in 1847. His adopted son was at this time only six years of age, and at the request of the late Rájá, he was taken under the protection of the British Government. He was placed to learn English at the Krishnagar College, and his father by blood, Bájendra, was appointed *Subaráhkár*, or manager of the kingdom and estates.

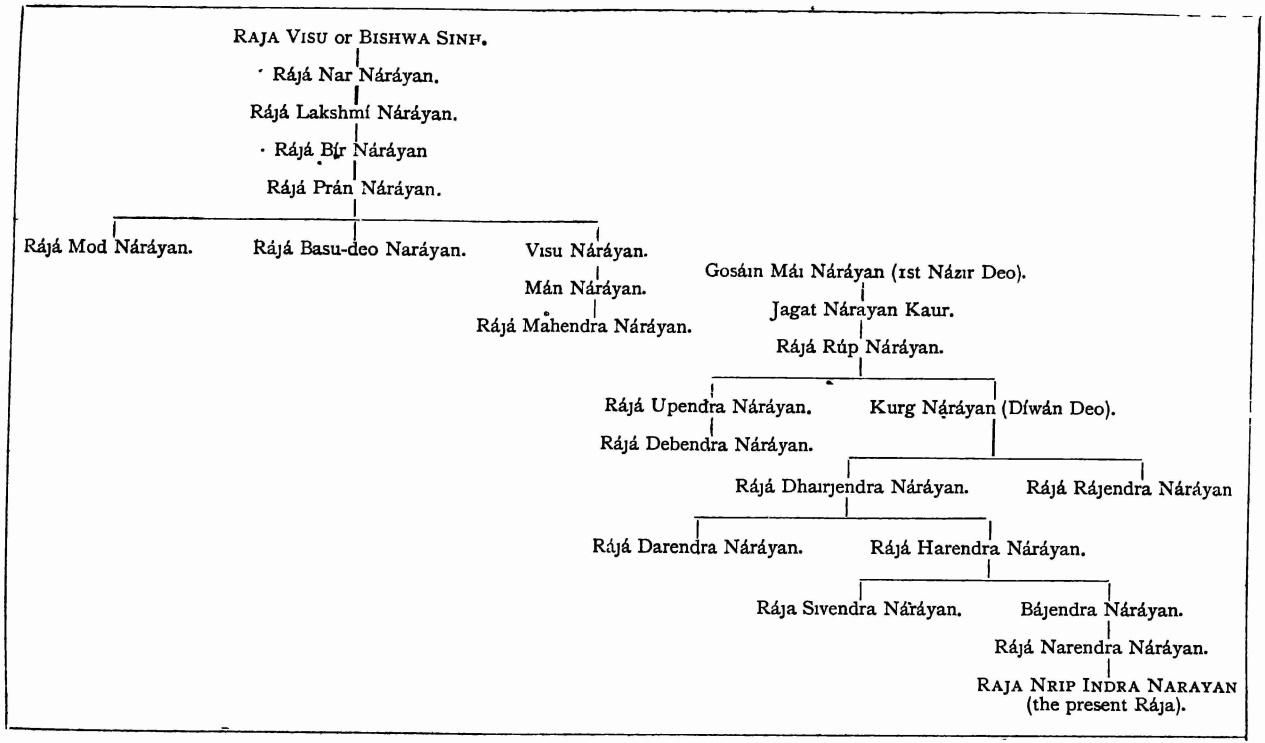
It was during this minority that Major Jenkins' Report, so frequently quoted from, was drawn up. The official title of Major Jenkins was Governor-General's Agent on the North-East Frontier; and in his capacity of Commissioner of Kuch Behar he visited the State four times between his appointment in 1834 and 1849, the date of his Report. He concludes by observing, that 'during the past thirty-three years, the affairs of Kuch Behar have been left solely to the management of the Rájá and his officers, without any direct interference of a Commissioner; for twenty-six years there has

been no resident Commissioner; and further, for an interval of fourteen consecutive years, Kuch Behar was not even visited by a Commissioner.'

Rájá Narendra Náráyan came of age in 1860, and took charge of the State. He died in August 1863, at the age of twenty-two, leaving only one son ten months old, called Nrip Indra Náráyan. There were three Ránís, who at first assumed the administration; but on their quarrelling amongst themselves, Government resolved to undertake the direct management of affairs during the minority of the prince. Mr. Talboys Wheeler, in his *Summary of Affairs of the Government of India in the Foreign Department*, 1864-69 (pp. 402-404), gives the following sketch of the events that then ensued:—'On 29th February 1864, the Governor-General recognised the succession of Nrip Indra Náráyan, and approved of the appointment of Lieutenant-colonel Haughton as British Commissioner, on a salary of Rs. 2000 a month (£2400 a year), to be paid out of the revenues of Kuch Behar. Colonel Haughton was directed to make no organic changes beyond what might be absolutely necessary; but to endeavour to give tone and vigour to the administration, reducing taxation and expenditure where necessary, encouraging the young scions of the family to manage their own lands, getting the schools in order, putting the police on a proper footing, and carrying out similar measures. Subsequently, the existence of actual slavery in Kuch Behar forced itself upon the attention of the Commissioner, and the matter was laid before the Governor-General. On 7th September 1864, the abolition of slavery was formally proclaimed at a public *Darbár;* and a Regulation in the Bengalí language, embodying the provisions of the Penal Code respecting kidnapping and abductions, was declared to be in force as regards all future seizures, sales, or detentions of persons, male or female. In March 1865 it was decided, after some controversy, that the marching *bátá*, granted to the Kuch Behar troops while on duty with the Bhután force, should be defrayed out of the revenues of Kuch Behar, and not by the British Government.'

The young Rájá is now (1876) being educated at the Patná College, under the supervision of an English tutor. His sister, Anandamaya, was married to the late *zamíndár* of Pángá in Rangpur, and £14,000 is now held in trust for her by Government. The genealogical table on the following page shows his descent from the founder of the family, so far as it can be traced:—

GENEALOGICAL TABLE SHOWING THE DESCENT OF THE PRESENT RAJA OF KUCH BEHAR.



NATIVE ADMINISTRATION.—In another paper, from which extracts have been published in *Selections from the Records of the Bengal Government*, No. 5, Major Jenkins gives an elaborate description of the system of native administration as it existed in 1849, from which the following paragraphs are condensed. This information is the more valuable, because no native records are known to exist, the old custom having been to make a periodical conflagration of all inconvenient documents.

The Criminal or *faujdárí* Court was composed of an *ahilkár*, a *náib ahilkár*, and a judge; the Civil Court, of a *sadr amín*, an *ahilkár*, and a judge of appeal. From the names given, it would appear that all these officials were immigrant Bengalís, with the exception of the two appeal judges, who were both sons of the *Sarbarahkár*, Bájendra Náráyan, and elder brothers of the Rájá. The word *ahilkár*, or, more correctly, *ahlikár*, is mentioned by Professor Wilson in his *Glossary* as being the peculiar 'title of the chief native judge, whether criminal or civil, in Kuch Behar.' It is derived from the Arabic word *ahl*, which is commonly used in composition in the sense of 'own,' 'peculiar.' An analogous term, *ahl-i-kalam*, is applied in Mysore to the civil officers. The *faujdárí ahilkár*, who was invested with the ordinary powers of a Magistrate in the Regulation Provinces, presided over the magisterial courts, and superintended the police. So far as Major Jenkins could ascertain, the cases were tried in much the same manner as in our Provinces, and the *amlás* were not inferior in capacity to the same officers in like courts anywhere. Apart from general corruption, to be attributed to the smallness and irregularity of the salaries, there appeared but little fault to be found in the proceedings. The whole of the establishment was paid by fees, and by fees only; these amounted in 1848 to Rs. 10,170 in the *náráyaní* currency. The number of cases of all sorts in the same year, including those pending, was 185 heinous offences, and 2214 petty offences; total, 2399. There were few petitions presented to Major Jenkins against the proceedings of the Magistrates' Court; and generally, on examination, there seemed to him little cause for interference. Over this court no control was exercised by the Superior Court of Appeal or Sessions Court. The prisoners in the jail were only 48, of whom 5 were confined for life; and there was one prisoner at large on security. There were seven *thánás* and *phárís*, the duties of which were conducted as in our Provinces, and the same books kept up.

Their names were—Sadr or Kotwál, Dinhátá, Mekhlíganj, Giládangí, Bhawáníganj, Shángganj, and Chakrábandí. There are now, according to the Census Report, six *thánás*, and only the three first of the above mentioned are to be found in the present list of names. The *náib ahilkár* tried petty offences, with the powers of an Assistant-Magistrate. Over all the Criminal Courts, including the Appellate or Sessions Court, there was the Ráj Sabha, presided over nominally by the Rájá or *Sarbarákhár* in person, assisted by the *Díwán* or accountant, and the *Mustaufí*. The Civil Courts were officered by an appeal judge, a *díwání ahilkár*, and a *sadr amín*. In these courts also fees were taken instead of stamps, at a rate approximating to that of the stamps in our Provinces. In 1848 the sum of *nárá-yaní* Rs. 7326 was collected from this source, and expended in payment of the establishment. It was a peculiarity in the practice of the Kuch Behar Courts, that, immediately on complaint, security was demanded from the defendant; if he could not give it, he was arrested, and had to maintain himself in prison. This custom appears to have prevailed from time immemorial; and the reason assigned for it is, that the debtors, who are mostly foreigners, would otherwise escape over the borders into Bhután or Rangpur.

The land tax in Kuch Behar was collected by four different officers, presiding over as many Revenue Courts. The system of taxation was so complicated as to have attracted the early attention of the Government. All *abwábs* and extra cesses were first abolished by the Collector of Rangpur in 1780; and again in 1790, it was found necessary to prohibit the exaction of *nazar* and *salámí*. In 1814, the distinction between *khálsa* and *khánagí* lands was also ordered to be abolished; but when the Rájá Harendra Náráyan came of age and assumed the charge of his country, this distinction was revived, and the former impositions were reinforced, and have continued to the present date (1849). The collection of the revenue from the *khálsa*, or Government lands proper, was in the hands of the *Díwán*. The heads of collection were *jamá*, which amounted to about two-thirds of the total; and ten misçellaneous heads. Apart from the *khálsa* lands, but also under the management of the *Díwán*, was the *díwán-bas*, which comprised all the newly cultivated waste lands. The *khálsa* lands were, for the most part, let out in *ijárás*, or leases for years; but they were also subdivided into six *maháls* of various denominations, not originating in local boundaries, but in arbitrary assessments upon the different

crops. For example, under the *bishiná mahál* a separate tax was levied upon sugar-cane, *sarisha*, and other of the more valuable products. The *ijárás* were usually granted for terms of not more than five years; and the majority of the farmers were the Ránís, the relatives of the Rájá, and the officers of the Courts. In many cases the leases were made out in the names of servants or dependants of these persons, for whom their masters or patrons stood security. The principal farmers almost invariably sub-let, and the sub-lessees used formerly again to re-let; but this latter practice, which led to oppressive exactions and a great deal of disturbance, had been discontinued since 1827, under directions from Major Jenkins. The late Rájá, Sivendra Náráyan, who had done much to improve the condition of the finances, had exempted from the ordinary rules all such *ijárás* as were held by members of the royal family; and their leases were renewable on an advance of 3 per cent. every five years. The *ijárás* were of very unequal extent, containing from one to several *mauzás;* they were subdivided into numerous *jóts*, also of very irregular size. In practice, the *ijárás* generally remained in the same hands; and the *jótdárs* and *rayats* were the permanent holders of their lands on well-defined *pattás*. Major Jenkins was of opinion that this system, on the whole, operated in favour of the actual cultivators, who were enabled to obtain the effectual protection of influential *ijáráddárs*. He did not receive a single petition from any one of the class of inferior *rayats*, though he saw a good deal of the country, and they had every opportunity of presenting their complaints. From the *jótdárs* he received several complaints. He did not, however, think that the common class of cultivators were in so comfortable a position as in our Provinces. Though the limits of cultivation were decidedly on the advance, there was no inducement offered for the production of the more valuable crops.

The remaining great branch of the land revenue was called the *khánagí mahál*s, and was subdivided into three departments, each under a distinct officer. The term *khánagí* means 'appertaining to the household;' and it appears that it is only in Kuch Behar that it is officially applied to the demesne lands of the Rájá. The principal of these *khánagí mahál*s was under the management of the person who was also the *faujdárí ahilkár;* and his collections amounted to nearly one-half of those of the *Díwán*. The two others were the *khás bas*, or the lands held directly by the Rájá himself; and the *bází mahál*s, including the *debottar*, *jágír*, and other estates. The

collection from each of these might amount to about Rs. 27,000. Each of the four revenue officers had a summary suit court of his own, from which there was no appeal but to the Civil Courts.

The three *parganás* of Bodá, Pátgrám, and Purub-bhág, in the District of Rangpur, which belong to the Rájá in *zamíndárí* tenure, were entirely under the management of the *Mustaufí* or accountant, who also managed the *bází maháls*. The *parganá* of Purub-bhág had previously been farmed by a European firm, with considerable profit to the Rájá; but the *Mustaufí* had again brought it under his own control, on the ground that a large number of old servants would otherwise be turned out of employment, and the *rayats* must be subjected to more or less oppression.

The troops maintained by the Rájá in 1849 consisted of three distinct bodies:—(1) The old company, numbering 81 men all told, who had been originally transferred from one of our provincial battalions; (2) the new company, composed of 58 men; and (3) a band of 200 *barkandázs*, under a *resáldár* and a *jamadár*. The command of the troops was no longer an honorary privilege of the Názir Deo. The Bengal Administration Report of 1871-72 states that the military force of Kuch Behar now consists of 80 *sipáhís*.

Major Jenkins concludes with observing that the people of Kuch Behar were still (1849) suffering much inconvenience from the prohibition to coin *nárávaní* rupees, and from the non-currency of the Government coin. But he thought that the Company's silver currency was gradually becoming more acceptable, and would probably become fully established in the country during the minority that had then just commenced. In the Historical Sketch of Kuch Behar State, several references have been made to the national mint and the *nárávaní* currency; but the date when the mint finally ceased to issue coin cannot be ascertained. The Rájás used to coin a few gold *mohars* of the usual standard, besides the well-known *nárávaní* half-rupees. The latter coins were actually worth only about 6 *ánnás*; and besides the confusion caused by this depreciation, there has followed the further mischief that, up to the present day (1875) the value of ordinary commodities and rates of wages are nominally higher than elsewhere. The half-rupees found their way in considerable numbers into Bhután, where they formed almost the only silver currency. They were often subjected to a fresh depreciation by some enterprising Bhutiá *jongpen*, who would add more copper and roughly re-stamp them with a hand-die.

BRITISH ADMINISTRATION.—Since the beginning of the year 1864, the State of Kuch Behar has been entirely under Government management, on account of the minority of the Rájá. According to the Bengal Administration Report for 1871-72, 'its revenue affairs and other public matters are included in the general departments of the Bengal Administration.' On the close of the Bhután war in 1866, Kuch Behar was chosen to give the name to the newly formed non-Regulation Commissionership, which comprised the Districts of Dárjíling, Jalpáiguri, and Goálpárá, as well as the Gáro hills and the State of Kuch Behar. Since 1875, consequent on the erection of Assam into an independent Province, the State of Kuch Behar has formed part of a new Commissionership, called the Rájsháhí Kuch Behar Division. The official title of the British officer administering the State is 'Superintendent of the native State of Kuch Behar.' Captain Lewin, B.S.C., who now (1876) fills that office, has given the following description of the Government:—'All the remaining officials of the State are natives. The Revenue department is managed by the *díwán;* the judicial by a *faujdárí ahilkár*, who exercises the full powers of a magistrate. The judge on the Civil side is called *diwání ahilkár;* and there are also *náib ahilkárs*, in charge of the three subdivisions into which the State has been divided, who have powers similar to those exercised by Deputy-Collectors and Deputy-Magistrates in the Regulation Districts of Bengal.' From the names given by Captain Lewin, it would appear that these officials are all Bengálí Bábus of good caste.

'Among many great reforms which have been introduced since the State has been under British supervision, the following are the most noteworthy. The re-arrangement and re-settlement of the land revenue, the State having been thoroughly surveyed and all tenures and rights recorded. By these operations the land revenue has been raised from Rs. 307,454 (£30,745, 8s. 0d.) in 1863-64, to a prospective income of about 9 *lákhs* of rupees (£90,000) in 1878-79. The English Law Codes have been introduced, subject to such alterations as local custom or prejudice rendered necessary. The Courts, both Civil and Criminal, have been officered by picked native officials, paid by the State, but chosen from among the best men of the Government subordinate executive service. The police of the State have been re-organized and established on a proper and efficient footing, under a highly-paid native Superintendent of proved ability. This department also comprises 2 inspectors, 7 sub-

inspectors, 21 head-constables, and 189 constables. There are 4 police stations and 5 outposts. The education of the people has been by no means neglected. There now exist 245 schools and 6497 scholars in the State in the year 1874-75, as compared with 1 school and 36 pupils in the year 1864. Good carriage roads have been laid out, connecting the State with adjacent commercial centres; rivers have been bridged, plantations of valuable timber trees have been made, and an efficient system of postal and telegraphic communication established.'

REVENUE AND EXPENDITURE.—By the Treaty of 1773, the Rájá of Kuch Behar bound himself to pay over to the British one-half of his annual revenues for ever; but it was at the same time stipulated that this tribute should be permanently fixed. In 1780, the tribute was fixed at *sikká* Rs. 62,722, equivalent to Company's Rs. 67,700, 15. 0 (£6,770, 1s. 10½d.), at which sum it has ever since remained. This figure would show that the total revenue of the State was at that time estimated at about £13,540. The tribute was paid into the Goálpárá Treasury; which still continues to be the case, even since the annexation of that District to the newly formed Province of Assam. In 1865, the earliest year for which there is any accurate information, the total revenue amounted to £59,141, 5s. od.; and the total expenditure to £56,398, 1s. od. Eight years afterwards, in 1873-74, the revenue had almost doubled, and the expenditure had more than doubled, slightly exceeding the revenue. In that year the revenue was £107,069, 6s. od.; and the expenditure £109,270, 2s. od. The table on the opposite page shows in detail the Balance Sheet of Kuch Behar State for the three years 1865, 1870-71, and 1873-74. The small table following shows comparatively the growth in the revenue, under three main items, for the six years 1867-70 to 1874-75. It will be observed that the two tables do not agree in the figures for 1870-71. Those in the Balance Sheet are taken from a printed return, especially furnished in 1873 by the officiating Commissioner of Kuch Behar Division; the others are taken from the 'Account of Kuch Behar State' by Captain Lewin.

THE FINANCIAL ADMINISTRATION of Kuch Behar is thus described in the Bengal Administration Report for 1874-75:—'The income of the State consists of Rs. 529,317 (£52,931, 14s. od.) from the land revenue, and Rs. 38,189 (£3818, 18s. od.) *sayerat*, or miscellaneous

[*Sentence continued on page* 434.

BALANCE SHEETS OF KUCH BEHAR STATE FOR THE THREE YEARS 1865, 1870-71, AND 1873-74.

REVENUE.

	1865.	1870-71.	1873-74.
	£ s.	£ s.	£ s.
1. Land Revenue,	29,070 15	40,896 10	44,261 12
2. *Abkárí* or Excise,	1 4	3,123 0	3,673 4
3. Stamps,	2,762 9	9,623 18	9,287 4
4. *Zamíndárí*,	23,839 10	25,719 0	23,723 14
5. *Debottar*,	1,234 17	5,538 18	4,108 16
6. Law and Justice,	1,361 2	1,426 14	1,345 10
7. Education,	78 3	273 14	661 18
8. Police,	...	3 14	...
9. Medical,	30 0	8 8	22 10
10. Public Works,	20 0	174 12	166 8
11. Charges General,	469 11	251 2	1,049 6
12. Interest, Dividends, etc.,	...	9,340 16	10,242 10
13. Miscellaneous,	273 14	15,712 18	8,526 14
Total,	59,141 5	112,093 4	107,069 6

EXPENDITURE.

	1865.	1870-71.	1873-74
	£ s.	£ s.	£ s.
1. Land Revenue,	10,316 3	32,477 10	29,837 14
2. *Abkárí* or Excise,	...	593 6	729 8
3. Stamps,	208 8	863 16	1,274 18
4. *Zamíndárí*,	12,662 3	26,245 12	18,295 16
5. *Debottar*,	2,613 5	3,163 10	4,525 6
6. Law and Justice,	3,127 14	3,967 4	5,140 6
7. Education,	702 4	4,766 10	5,209 4
8. Police,	254 0	3,863 0	3,852 4
9. Medical,	375 4	1,021 0	3,762 10
10. Public Works,	5,914 12	10,430 12	8,329 6
11. Charges General,	8,447 4	991 4	2,872 10
12. Military,	7,047 0	1,393 18	1,626 16
13. Administration,	893 16	7,146 18	5,305 10
14. Pensions and Charitable Allowances,	1,377 1	1,672 8	2,212 4
15. Household Expenses,	2,459 7	13,903 18	11,289 14
16. Miscellaneous,	...	7,779 2	5,007 2
Total,	56,398 1	120,279 8	109,270 2

COMPARATIVE STATEMENT SHOWING THE REVENUE COLLECTIONS IN KUCH BEHAR STATE FOR THE SIX YEARS 1869-70 TO 1874-75.

Annual State Revenue Collections.	1869-70	1870-71	1871-72	1872-73	1873-74.	1874-75.
	£	£	£	£	£	£
1. Land Revenue, . .	36,042	41,168	46,435	46,435	48,370	59,909
2. Other Estates, . .	37,800	28,186	25,719	22,661	23,723	35,075
3. Miscellaneous, . .	20,299	22,619	39,938	31,117	34,975	49,360
Total, . .	94,141	91,973	112,092	100,213	107,068	144,344

Excess in 1874-75 due to sale of Government securities for Famine Relief Operations.

Sentence continued from page 432.]
revenue,—in all, Rs. 567,506 (£56,750, 12s. 0d.). Besides this, there is the income from the *zamíndárí* (lands and houses) in British Districts, held by the Rájá as private property, for which a separate account is kept; and there are also other miscellaneous items, which raise the total to more that 11½ *lákhs* of rupees (£116,000). The expenditure of the State is kept well within this limit. The land revenue collections have risen within the last ten years from 3½ to 5¼ *lákhs* of rupees (from £35,000 to £52,500). In place of the debts which existed at the beginning of the present minority, there is now an accumulation of 15 *lákhs* of rupees (£150,000), of which the greater part has been invested in public securities. An expenditure of over 2 *lákhs* (£20,000) was incurred in the prevention of famine in 1874. The State accounts are under the supervision of a trained native accountant from Calcutta; and a regular budget system has been established. The right of coinage has been given up, and British rupees are current; but the honorary privilege is reserved of striking a few pieces on the occasion of each fresh succession. The *sadr* or central distillery system is adopted for the Excise in spirits; and the Stamps are also managed on the British method, but the stamps are manufactured separately, in England, in the name of the Rájá. The British system of registration of assurances has lately been introduced, and is making a fair commencement. The records, both fiscal and judicial, are carefully arranged on racks within masonry buildings, after the same fashion as in Bengal Districts.'

LAND REVENUE.—The Land Tax proper does not form so large a portion of the total revenue in the Kuch Behar State as it does in the British Districts of Bengal. It has already been mentioned that the new Settlement, now coming into operation, is expected to

raise the land revenue from £30,745 in 1863-64 to nearly £90,000 in 1878-79.

In 1866, the earliest year for which information is available, the total land revenue was £34,357, 10s. od.; the total number of estates, 1969; and the total number of proprietors or coparceners, 2116. Of these, 1667 estates and 1795 proprietors paid under £10 a year, yielding a total revenue of £3471; average for each estate, £2, 1s. 7½d.; average for each proprietor, £1, 18s. 8d. The number of estates paying above £10 and under £100 was 215, and the number of proprietors or coparceners was 233, yielding a total revenue of £6068, 6s. od.; average for each estate, £28, 4s. 6d.; average for each proprietor, £26, os. 10½d. Of estates paying over £100 there were 87, owned by 88 proprietors or coparceners, and paying a total revenue of £24,818, 4s. od.; average for each estate, £285, 5s. 4½d.; average for each proprietor, £282, os. 5½d. The Budget Estimate for 1870-71 gives the total land revenue at £39,218, 9s. od. (the amount actually realized was £40,896, 10s. od.), paid by 2717 estates, owned by 2910 proprietors or coparceners. Of these, 2207 estates and 2353 proprietors pay under £10 a year, yielding a total revenue of £5158, 8s. od.; average per estate, £2, 6s. 9d.; average per proprietor, £2, 3s. 10½d. The estates paying under £100 and over £10 were 432, and the proprietors or coparceners 473, with a total revenue of £10,266, 16s. od.; average per estate, £23, 15s. 4d.; average per proprietor, £21, 14s. 1d. The estates paying over £100 were 78 in number, and the proprietors and coparceners 84, with a total revenue of £23,793, 5s. od.; average per estate, £305, os. 10d.; average per proprietor, £283, 5s. o½d.

RENT SUITS.—The principles contained in Act x. of 1859—the Rent Law of Bengal—and the subsequent laws based upon it, have been extended to the State of Kuch Behar. In 1867-68, the number of original suits instituted under this Act was 1002, and the number of miscellaneous applications was 166. In the following year (1868-69) these numbers had somewhat increased; the original suits were 1160, and the miscellaneous applications, 251.

COURTS OF JUSTICE.—In 1828, the earliest year for which figures are available, there was 1 Criminal or Magisterial Court, and 4 Revenue and Civil Courts; in 1850, 2 Criminal and 7 Revenue and Civil Courts; in 1860-61, also 2 Criminal and 4 Revenue and Civil Courts; and in 1870-71, 5 Criminal Courts and 10 Revenue and Civil Courts.

Police Statistics.—In 1850, the total police force of Kuch Behar amounted to 104 persons, thus classified :—11 native officers, 81 footmen, and 12 *chaukídárs*. The cost in the same year is returned at Rs. 59 per month, or £70, 16s. od. a year; but it is also remarked that this sum, though properly payable from judicial receipts, was seldom received by the men. In 1865, the total cost of the police is returned at £254 for the year. The old system of police is thus described by Captain Lewin :—'There were 5 police stations and 2 outposts. Among the 5 stations there were distributed 5 *dárogás*, at a collective salary of Rs. 60 per month, or £72 a year; 7 *náib dárogás*, on Rs. 35 per month, or £42 a year; 6 *jamadárs*, on Rs. 24 per month, or £28, 16s. od. a year; 78 *barkandázs*, on Rs. 234 per month, or £280, 16s. od. a year; 510 *piyádás*, paid by fees at the rate of 12 *ánnás* (1s. 6d.) for each process. At each of the two outposts of Singímárí and Khagribárí, there was 1 *náib dárogá*, on Rs. 5 per month, or £6 a year; 4 *barkandázs*, on Rs. 12 per month, or £14, 8s. od. a year; and 10 *piyádás*, paid by fees. The total number, therefore, of the police force under the old system was 636 men of all ranks; and the total cost, exclusive of the *piyádás*, was Rs. 387 per month, or £464, 8s. od. a year.'

The new police force is constituted as follows, distributed in 4 stations and 5 outposts :—1 native superintendent, on a salary of Rs. 341 per month, or £409, 4s. od. a year; 2 inspectors, on a total salary of Rs. 250 per month, or £300 a year; 7 sub-inspectors, on Rs. 420 per month, or £504 a year; 21 head constables, on Rs. 290 per month, or £348 a year; 189 constables, Rs. 1258 per month, or £1509, 12s. od. a year; total number, 220 officers and men; total cost, Rs. 2559 per month, or £3070, 16s. od. a year. As compared with the area of the State, these figures give 5·87 square miles to each policeman, and a cost of £2, 7s. 6d. a year for each square mile; as compared with the population, they show one policeman to every 2420 souls, maintained at a cost of 1¼d. a year per head of the inhabitants. There is now no village watch in the State.

The two tables on p. 438, taken from Captain Lewin's 'Account,' show in a comparative form—(Table I.) the Criminal Statistics of Kuch Behar State for the two years 1867-68 and 1874-75; and (Table II.) the Jail Statistics for the same two years. Besides the jail at Kuch Behar town, to which alone these figures refer, there are also 3 lock-ups in the State, where prisoners are kept whose

sentences do not exceed the term of 2 months. The jail is described as an economically-constructed building of mats and bamboos, clean and well kept.

EDUCATIONAL STATISTICS.—In 1864, the earliest year for which information is available, there was only one school in Kuch Behar State, attended by 36 pupils. In September 1871, these numbers had increased to 46 schools, attended by 1486 pupils; and by 31st March 1875, there was a still further increase to 245 schools and 6497 pupils, of whom 352 were girls. As compared with the area of the State and its population, these last figures give one school to every 5·3 square miles, and one person at school to every 82 of the inhabitants.

The following table, taken from Captain Lewin's 'Account,' shows in detail the comparative state of education in Kuch Behar for the two years 1873-74 and 1874-75:—

EDUCATIONAL STATISTICS OF KUCH BEHAR STATE FOR THE TWO YEARS 1873–74 AND 1874–75.

Name of Schools.	1873–74.		1874–75.	
	No. of Schools.	Pupils on roll on 31st March.	No. of Schools.	Pupils on roll on 31st March.
I. STATE INSTITUTIONS.				
Higher Schools,	1	137	1	176
Middle Schools,	2	274	2	331
Normal Classes,	2	27	2	44
Boarding School,	1	...	1	...
Artisan School,	...	...	1	39
II. AIDED.				
Middle Schools (English),	2	70	2	62
Middle Vernacular,	52	1543	66	2208
Lower Vernacular,	33	766	47	1216
Night Schools,	10	223	15	382
Girls' Schools,	14	207	16	251
III. UNAIDED.				
Middle Schools,	5	138	9	250
Lower Schools,	10	257	13	390
Girls' Schools,	6	65	7	101
Night Schools,	7	124	9	147
Páthsálás,	42	686	39	734
Maktabs,	12	88	15	166
Total,	199	4605	245	6497

Comparative Statement of Criminal Statistics in Kuch Behar State for the Two Years 1867–68 and 1874–75.

Year	Number of Cases instituted and inquired into.	Number of Persons brought to Trial during the Year	No. of Persons Convicted.		No. of Persons Released or otherwise disposed of.		Number of Persons awaiting Trial at the end of the Year.	Percentage of Convictions to total number of Cases disposed of.	Amount of Property Stolen.	Amount of Property Recovered.	Percentage of Recovery to total amount Stolen.
			By Magistrates.	By Sessions' or Commissioner's Court.	By Magistrate.	By Sessions' Court or Commissioner.					
									£ s.	£ s.	
1867–68, ...	1060	1745	464	26	1169	18	68	29·2	1704 6	252 16	14·8
1874–75, ...	2674	2614	1692	57	840	18	7	67·08	770 0	209 10	27·2

Comparative Statement of Jail Statistics in Kuch Behar State for the Two Years 1867–68 and 1874–75.

Year.	Number of Jails	Number of Prisoners remaining at the end of the previous Year.		Number admitted during the Year.		Total number of Prisoners in the Jail.		Released, died, escaped, transferred, etc., during the Year.		Remaining in Jail at the close of the Year.		Average net Cost per head during the Year.	Income from the Jail Manufactures, etc., remitted to the Treasury during the Year.
		Male.	Female	Male.	Female	Male.	Female	Male.	Female.	Male.	Female		
												£ s. d.	£ s. d.
1867–68, ...	1	247	4	473	10	722	14	516	8	206	6	Cannot be ascertained.	61 19 0
1874–75, ...	1	1091	5	1091	29	1290	34	1014	31	276	3	4 13 4½	478 8 5

The Bengal Administration Report for 1874-75 contains the following paragraph on this subject:—'There is one good school of the status of a *zilá* (District) school, which has won many scholarships tenable in the colleges of Bengal; many middle-class schools, of which some are supported by the *jótdárs;* one female school for the upper classes, founded by the *Dwar Bakshí*, a high native official, and several girls' schools in the interior; a boarding-school, where many youths of the Rájá's kin and caste are boarded and educated; an artisan school, which may be called a technical institution of the lower class; and many primary schools. There is a fine library of English literature in Kuch Behar town. Money for a valuable Sanskrit scholarship has lately been given by a native gentleman.'

Postal Statistics.—During the ten years between 1861-62 and 1870-71, the number of letters, etc. received at the post office in Kuch Behar has increased from 16,896 to 85,250, or more than fivefold; the postal receipts in the same period increased from £130, 9s. 3d. to £306, 15s. 8d., or more than twofold; while the expenditure exactly trebled, rising from £35, 4s. od. to £107, 4s. od. In the case both of the letters, etc. received, and of the total charges, this increase took place entirely in the earlier half of the decade.—See table on next page.

Administrative Divisions.—The State of Kuch Behar is now (1876), according to Captain Lewin, divided into three Subdivisions: —(1) Mekhlíganj; (2) Dinhátá; and (3) Mátábhángá. Each of these is under the charge of an officer, styled *náib ahilkár*, whose powers are analogous to those exercised by a Deputy-Collector and Deputy-Magistrate in the Regulation Districts of Bengal.

In 1870-71 the officiating Commissioner of the Kuch Behar Division reported, in a special return, that there were then two Subdivisions in the State of Kuch Behar:—(1) The *sadr* or Headquarters Subdivision of Nij Behar, with 11 Courts (Magisterial, Revenue, and Civil), a police force of 189 officers and men, and 30 *chaukidárs;* (2) the Dinhátá Subdivision, established on 11th January 1867, with 2 Courts and 49 policemen, the annual cost of administration in the Subdivision being £8519, 6s. od. The Census Report of 1872 takes account of only the *sadr* Subdivision, under which it comprises the 6 following *thánás* or police circles:—(1) Mekhlíganj, (2) Mátábhángá, (3) Lál-bázár, (4) Dinhátá, (5) Tufánganj, and (6) detached portions in the Districts of Jalpáigurí and Rangpur.

[*For continuation see next page.*

TABLE SHOWING THE NUMBER OF LETTERS, ETC. RECEIVED IN, AND DESPATCHED FROM, POST OFFICES OF KUCH BEHAR STATE, WITH THE POSTAL RECEIPTS AND DISBURSEMENTS, FOR THE YEARS 1861-62, 1865-66, AND 1870-71.

	1861-62.		1865-66.		1870-71.	
	Received.	Despatched.	Received.	Despatched.	Received.	Despatched
Private Letters,	14,122	11,252	63,266	68,899	Not separately shown.	Information not available.
Service Letters,	600	1,624	16,176	7,996		
Total Letters,	14,722	12,876	79,442	76,895	77,920	
Newspapers,	1,894	...	8,234	4,268	5,540	
Parcels,	210	12	793	409	1,488	
Books,	70	2	239	24	302	
Grand total,	16,896	12,890	88,708	81,596	85,250	
Receipts from cash collections (exclusive of those from sale of postage stamps),	£130 9 3		£178 0 5		£306 15 8	
Total charges,	35 4 0		100 16 0		107 4 0	

Continuation from previous page.]

The Fiscal system of division according to *parganás* has never been adopted in the State of Kuch Behar.

CLIMATE, METEOROLOGY, ETC.—Captain Lewin writes as follows:—'The climate of Kuch Behar is damp and malarious, but not so hot as in other parts of Bengal. The wind sets much from the east. Heavy gales, in general from the north-west, accompanied with thunder, lightning, and rain, are prevalent from about the 15th March till 15th May. The rains may be said to commence in April, and terminate in October. Fogs are common in the early mornings during the cold weather, but the days are clear, cool, and pleasant; there is in general a breeze blowing all the year round, and the nights during the hot weather are seldom excessively warm.'

On pp. 442, 443 are two tables (also extracted from Captain Lewin's

'Account') which show the monthly rainfall in Kuch Behar State for the four years 1872 to 1875 inclusive; and also the monthly temperature, with other meteorological statistics, for the year 1875. It appears that the average annual rainfall, as gathered from four years' observation, amounts to 123·60 inches; and that in 1875 the rainfall was deficient by no less than 33·80 inches.

MEDICAL HISTORY.—The chief diseases that prevail in Kuch Behar are dysentery, malarious fevers, spleen, goitre, and venereal diseases. The first two may be attributed to the dampness of the soil and humidity of the climate, together with the excessive heat during the day in the summer months, followed by sudden cold after sunset. Goitre is attributed to drinking the water of certain streams. Many improvements have recently been effected in the town and vicinity, such as clearing away jungle, opening up roads, filling up ditches, constructing drains, etc., all of which have tended to diminish the prevalence of fever. The only epidemic that appears to have occurred of late is that of cholera in March 1869, the specific character of which was, that after the purging and vomiting had ceased, the patients relapsed into a remittent type of fever, which terminated generally in coma and death. It principally attacked the ill-fed peasantry and labourers, and many fled through fear. No accurate statistics of the mortality can be obtained; but the Sub-Assistant Surgeon in medical charge of the State says, that out of 528 cases that came under treatment, 247 were cured and 281 died. The steps taken for the protection of the people were the distribution of medicines, by means of native doctors and the police, to all the villages and families; a great religious sacrifice (*pujá*) was offered to the goddess Kálí by the State, to encourage the people in their superstitious belief in her protecting power.

No vital statistics are collected in Kuch Behar. During the year 1870, the total number of patients treated at the dispensary was 3973; average daily attendance, 10·2; proportion of deaths to patients treated, 31 per thousand.

The following paragraph on this subject is taken from Captain Lewin's 'Account' (1876):—'Intermittent fever or ague in its several varieties (chiefly quotidian) is very prevalent; remittent fever is not very common; rheumatic and splenic affections are often met with; cholera is apparently endemic to the State, and occasionally epidemic; goitre, dysentery, diarrhœa, dyspepsia, Ascaris lumbri-

[*Sentence continued on page* 444.

Statistics of Rainfall in Kuch Behar State for the Four Years 1872–75.

Year.	Amount fallen and number of Wet Days.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.	
														Inches.	Wet Days.
1872	Inches, . .	1·2	...	·52	8·29	11·45	43·20	16·12	26·56	18·68	6·57	..	...	132·59	...
	Wet days, . .	1	...	2	10	16	21	18	22	17	5	...	...	...	112
1873	Inches, . .	...	...	1·46	6·97	3·53	51·64	22·93	18·11	10·16	...	...	...	114·80	...
	Wet days, . .	...	...	2	13	6	23	21	20	16	...	...	...	...	101
1874	Inches, . .	1·40	·63	·93	8·03	15·74	29·93	40·76	16·70	33·06	10·04	...	..	157·22	..
	Wet days, . .	2	4	4	9	18	24	22	23	21	9	...	...	...	136
1875	Inches, . .	·20	...	·17	6·41	11·09	23·93	18·46	24·35	5·19	...	...	...	89·80	..
	Wet days, . .	2	...	2	9	20	24	18	21	14	...	...	...	...	110

METEOROLOGICAL STATISTICS IN KUCH BEHAR STATE FOR THE YEAR 1874–75.

Months.	Hydrometer.							Thermometers, Self-Registering.				Direction of Wind.																
	Dry Bulb.		Wet Bulb.		Humidity.			Maximum.	Minimum.	Mean.	Range																	
	10 A.M.	4 P.M.	10 A.M.	4 P.M.	10 A.M.	4 P.M.	Mean.	10 A.M.	4 P.M.			North.	N.N.E.	N.E.	E.N.E.	East.	E.S.E.	S.E.	S.S.E.	South.	S.S.W.	S.W.	W.S.W.	West.	W.N.W.	N.W.	N.N.W	Calm.
January, .	62·0	68·5	58·0	60·7	78·6	64·7	71·6	76·4	49·1	62·7	27·3	...	...	3	...	27	...	8	...	2	...	17	...	5	...	...	...	...
February,	67·7	77·0	60·3	64·7	67·8	49·8	58·8	82·4	52·5	67·4	29·9	...	...	2	...	15	...	3	...	1	...	26	...	5	...	...	...	4
March, .	77·0	83·8	67·5	71·2	50·1	51·9	56·0	90·8	62·6	76·7	28·2	...	...	11	...	21	...	10	...	1	...	12	...	3	...	3	...	1
April, . .	80·3	86·2	75·5	78·5	80·1	70·3	75·2	91·1	68·4	79·9	22·7	1	4	10	1	27	3	3	3	1	3	1	...	...	...	1	...	...
May, . .	81·2	87·6	75·8	79·5	76·6	72·6	74·6	90·9	72·7	81·2	18·2	1	2	11	7	23	2	4	1	4	2	...	...	...	...	1	...	4
June, . .	81·3	86·5	78·4	80·8	86·7	77·7	82·2	92·5	73·2	82·8	19·3	1	5	3	2	13	4	8	8	3	1	1	...	...	2	1	...	8
July, . .	83·1	87·4	79·6	81·2	84·9	76·1	80·5	90·9	76·2	83·5	14·1	1	2	5	...	8	5	4	4	11	6	6	...	3	1	...	...	6
August, .	84·4	87·5	79·9	80·8	81·6	76·0	78·8	91·5	76·9	84·2	14·4	1	...	...	...	23	5	7	2	8	1	5	2	2	...	3	1	2
September,	80·6	82·4	77·6	79·0	87·5	88·4	87·9	88·9	70·7	79·8	18·2	..	2	10	...	12	3	4	1	3	2	9	...	6	...	1	...	7
October, .	81 1	84·6	76 4	77·0	81·1	70·9	76·0	90·2	70·0	80·1	20·2	1	5	9	...	16	...	5	...	2	...	12	...	6	...	2	...	4
November,	75·1	80·0	68·9	70·2	71·6	62·6	67·1	84·2	61·1	72·6	23·5	...	...	14	...	19	...	4	...	3	...	13	...	1	...	4	...	2
December,	68·8	73·2	63·0	64·0	70·2	58·5	64·3	78·8	52·4	65·6	26·4	...	...	5	9	17	...	5	...	1	...	14	...	5	...	4	...	2
Total, .	922·6	984·7	860·9	887·6	926·8	819·5	873·	1048·6	785·8	917·2	262·4	6	20	83	19	223	22	65	19	40	15	116	2	36	4	19	1	40
Mean, .	76·8	82·0	71·7	73·9	77·2	68·2	72·7	87·3	65·4	76·3	21·8	$1\frac{6}{12}$	$1\frac{8}{12}$	$6\frac{11}{12}$	$1\frac{7}{12}$	$18\frac{7}{12}$	$1\frac{10}{12}$	$5\frac{6}{12}$	$1\frac{7}{12}$	$3\frac{4}{12}$	$1\frac{3}{12}$	$9\frac{8}{12}$	$\frac{2}{12}$	3	$\frac{4}{12}$	$1\frac{7}{12}$	$\frac{1}{12}$	$3\frac{4}{12}$

Sentence continued from page 441.]
coides, bronchial complaints, and skin diseases are very common; small-pox, although not of usual occurrence, is occasionally epidemic. Vaccination has been introduced during the last five years, and has made considerable progress among the people.' Inoculation is now prohibited.

'The sanitary condition of Kuch Behar is watched over by a Civil Surgeon (who may be either European or native), under whom are a native Assistant-Surgeon and four native doctors, distributed throughout the State in charge of the several local dispensaries.'

No epidemic affecting the cattle appears to have occurred within the past few years; but cattle-pox makes its appearance from time to time, principally attacking the buffaloes.

NATIVE MEDICAL PRACTITIONERS.—The native medical practitioners (*kabirájs*) of the State rely greatly upon charms and invocations in their treatment; and those who do use drugs, make use of serpent's venom in several cases, and vegetable irritant applications to the head, called *varung*.

INDIGENOUS DRUGS.—The following is a list of the indigenous or vegetable drugs common to the State, and the uses to which they are put:—(1) *Bél* (Ægle marmelos), used in diarrhœa and dysentery; (2) *ishánmul* (Aristolochia Indica), used in cases of fever and snake-bite; (3) *satamuli* (Asparagus sarmentosus); (4) *kotilu* (Asparagus vinus), used in diarrhœa; (5) *nim* (Azadirachta Indica), a bitter tonic; (6) *palás-páprí* (Butea frondosa), used in diarrhœa; (7) *sidhi* (Cannabis Indica), a sedative; (8) *sosha* (Cucumis sativus), the seed is a diuretic; (9) *dhatura* (Datura stramonium), a sedative; (10) *anantamul* (Hemidesmus Indicus), an alterative; (11) *golanchá* (Tinospora cordifolia), a tonic; (12) *madhu*, or honey; (13) *pudina* (Mentha sativa), a carminative; (14) *rái* (Sinapis alba); (15) *hátisurá* (Tiaridium Indicum), applied to ulcers.

FAIRS AND RELIGIOUS GATHERINGS. — The only religious gathering in the State is one at Godádhar, on the river of the same name, which takes place in the month of March, lasting one day only. The cholera epidemic of 1869 was traced to this place, two or three cases occurring on the spot. About three thousand people attend this gathering, the principal ceremony being ablution in the river.

BOTANY.—The plants commonly found in Kuch Behar include

the following:—(1) *Arhar* (Cajanus Indicus); (2) *tisi*, or common flax (Linum usitatissimum); (3) *aparájitá* (Clitorea ternatea); (4) *anantamul* (Hemidesmus Indicus); (5) *apan* (Achyranthes aspera); (6) *ám*, or mango (Mangifera Indica); (7) *asok* (Jonesia asoca); (8) *ámádá* (Curcuma amada); (9) *akand* (Calotropis gigantea); (10) *ajawan* (Ptychotis ajowan); (11) *átá* (Anona squamosa); (12) *ádá*, or ginger (Zingiber officinale); (13) *anar* (Punica granatum); (14) *anánas* (Ananassa sativa); (15) *ámrul* (Pyrus communis); (16) *amrá* (Spondias mangifera); (17) *amlá* (Emblica officinalis); (18) *imli* (Tamarindus Indica); (19) *akh* (Saccharum officinarum); (20) *kakurá* (Momordica muricata); (21) *ulutkamul* (Abroma augusta); (22) *kachu* (Colocasia antiquorum); (23) *endi*, or castor-oil plant (Ricinus communis); (24) *kankrol* (a species of Momordica); (25) *kunjalt* (Pergularia odoratissima); (26) *kantikári* (Solanum jacquini); (27) *kadambá* (Nauclea cadamba); (28) *kalá* (Musa paradisaica); (29) *kadu* (Lagenaria vulgaris); (30) *kamal* or *padmá* (Nelumbium speciosum); (31) *karabi* (Nerium odorum); (32) *tulá* (Gossypium herbaceum); (33) *kámrángá* (Averrhoa bilimbi); (34) *kalmi* (Ipomœa reptans); (35) *kánthál* (Artocarpus integrifolia); (36) species of roses; (37) *kámini* flowers (Murraya exotica); (38) *kálásundá* (Cassia sophera); (39) *kálá jirá* (Nigella Indica); (40) *dhaturá* (Datura stramonium); (41) *kálá dhaturá* (Datura fastuosa); (42) *kusá* (Saccharum spontaneum); (43) *kunch* (Abrus precatorius); (44) *kundphul* (Jasminum hirsutum); (45) *kamal* (Nymphæa lotus); (46) *kusum* (Carthamus tinctorius); (47) *kul* (Zizyphus jujuba); (48) *krishna-churá* (Poinciana pulcherrima); (49) *til* (Sesamum); (50) *kea* (Pandanus odoratissimus); (51) *kishur* (Rottlera tinctoria); (52) *pát*, or jute (Corchorus capsularis); (53) *khejur* (Phœnix sylvestris); (54) *khaskhas* (Andropogon muricatum); (55) *khesárí* (Lathyrus sativus); (56) *gandha bhedálí* (Hedyotis villosa); (57) *gandaraj* (Gardenia florida); (58) *gáb* (Diospyros embryopteris); (59) *dhaniyá* (Coriandrum sativum); (60) *dhán*, or rice (Oryza sativa); (61) *dhundhul* (Luffa pentandra); (62) *nageswar* (Mesua ferrea); (63) *nárikel*, or cocoa-nut (Cocos nucifera); (64) *nim* (Azadirachta Indica); (65) *patal* (Trichosanthes dioica); (66) *palás* (Butea frondosa); (67) *páná* (Salvinia imbricata); (68) *pálangsák* (Beta Bengalensis); (69) *pálitámadár* (Erythrina Indica); (70) *pipal* (Piper nigrum); (71) *pudina* (Mentha viridis); (72) *pui sák* (Basella cordifolia); (73) *pápayá* (Carica papaya); (74) *posta* (Papaver somniferum); (75) *phuti* (Cucumis momordica); (76) *bak*

(Agati grandiflora); (77) *bakul* (Cæsalpinia sappan); (78) *bat* (Ficus Indica); (79) *barháti* (Dolichos sinensis); (80) *bahárá* (Terminalia Moluccana); (81) *báns*, or bamboo (Bambusa arundinacea); (82) *báigun*, or egg fruit (Solanum melongena); (83) *bisalya karalí* (Menispermum cordifolium); (84) *bet* (Calamus rotang); (85) *bel* (Ægle marmelos); (86) *belphul* (Jasminum duplex); (87) *bhánt* (Clerodendrum viscosum); (88) *mauri* (Fœniculum panmorium); (89) *martaman kalá* (Musa sapientum); (90) *madhu málatı* (Asclepias volubilis); (91) *mallıka phul* (Jasminum sambac); (92) *musurí* (Ervum lens); (93) *sím* (Canavalia gladiata); (94) *mádhá* (Erythrina fulgens); (95) *mádhábi* (Hiptage madhablota); (96) *mán* (Colocasia Indica); (97) *supárí*, or betel-nut (Areca catechu); (98) *golanchá* (Tinospora cordifolia); (99) *genda* (Tagetes erecta); (100) *ghritakumárí* (Aloe Indica); (101) *champá* (Michelia champaca); (102) *champá nota* (Amarantus polygamus); (103) *chichingá* (Trichosanthes anguina); (104) *chitá* (Plumbago zeylanica); (105) *chuka palang* (Rumex vesicarius); (106) *chubri alu* (Dioscorea globosa); (107) *matar* (Pisum sativum); (108) *chhota* (Cicer arietinum); (109) *janirá* (Andropogon bicolor); (110) *jabá* (Hibiscus rosa-sinensis); (111) *jaipál* (Croton tiglium); (112) *jatı* (Jasminum grandiflorum); (113) *juin* (Jasminum auriculatum); (114) *jhumiká látá* (Passiflora); (115) *tagar* (Tabernœmontana coronaria); (116) *támák*, or tobacco (Nicotiana tabacum); (117) *tarmuj* (Cucurbita citrullus); (118) *talda báns* (Dendrocalamus tulda); (119) *pán*, or betel-leaf (Piper betle); (120) *tál*, or palmyra tree (Borassus flabelliformis); (121) *tut* (Morus Indica); (122) *tun* (Cedrela toona); (123) *tulsi* (Ocimum villosum); (124) *teori* (Ipomœa turpethum); (125) *tejpát* (Laurus cassia); (126) *thul puri* (Hibiscus mutabilis); (127) *durna* (Cynodon dactylon); (128) *dapáti* (Impatiens balsamina); (129) *máskalai* (Phaseolus Roxburghii); (130) *mug* (Phaseolus mungo); (131) *mutha* (Cyperus communis); (132) *múli* (Raphanus sativus); (133) *methi* (Trigonella fœnum-græcum); (134) *jao* (Hordeum hexastichon); (135) *lál karábi* (Nerium odorum); (136) *rakta káncha* (Bauhínia purpurascens); (137) *rangan* (Ixora parviflora); (138) *rajánígandhá* (Polianthes tuberosa); (139) *rasun* (Allium sativum); (140) *rai* (Sinapis ramosa); (141) *rangasak* (Amarantus Gangeticus); (142) *ránduní* (Pimpinella involucrata); (143) *rudra rakohi* (Elæocarpus ganitrus); (144) *lanká marich*, or chilli (Capsicum longum); (145) *lal sakarkand alu* (Batatas erythrorhiza); (146) *lichi* (Nephelium leechee); (147) sweet potato (Pachyrhizus

angulatus); (148) *sujiná* (Moringa pterygosperma); (149) *san*, or Indian hemp (Crotolaria juncea); (150) *sátimuli* (Asparagus racemosus); (151) *singhara* (Trapa bispinosa); (152) *simul*, or cotton tree (Bombax Malabaricum); (153) *sisu* (Dalbergia sissoo); (154) *sasá* (Cucumis sativus); (155) *susuni sák* (Marsilea quadrifolia); (156) *surjyá mukhi* (Helianthus tuberosus); (157) *háritaki* (Terminalia chebula); (158) *hoglá* (Typha elephantina); and (159) *khet papra* (Mollugo pentaphylla).

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